United States
Department of
Agriculture

Forest
Service

Southwestern
Region

Photo Series For Quantifying Forest Residues in the Southwestern Region

Data Compiled From: Black Hills Ponderosa Pine and Spruce Type, 1990; GTR-PNW-105, 1980; GTR-PNW-52, 1976; GTR-PSW-56, 1981

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PLANT SPECIES CITED

Common name

Ponderosa pine
Black Hills spruce (White spruce)
Snowberry
Kinnikinnic

METRIC CONVERSIONS

1 acre = 0.4047 hectare
2.471 acres = 1 hectare
1 cubic foot = 0.02832 cubic meter
35.31 cubic feet = 1 cubic meter
1 foot = 0.3048 meter
3.281 feet = 1 meter
1 inch = 2.54 centimeters
0.3937 inch = 1 centimeter
1 ton (short) = 0.907 ton (metric)
1.102 tons (short) = 1 ton (metric)

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WHAT ARE THESE PHOTO SERIES?

These photo series are arrays of photos showing different levels of residues. Included are both activity and natural residue situations.

Activity photos are supplemented with information which includes:

Measured quantities by size classes, average depth, ground area covered and other residue data.

Harvesting or thinning information.

Natural photos are supplemented with information which includes:

Measured quantities by size classes, average depth, ground area covered and other residue data.

Characteristics of overstories, snags, understories, brush, grasses and forbs.

Thus, the series provide a basis for quantifying and describing existing, expected and desired residue loadings on other areas and serve as a communication link between users.

WHY ARE THEY NEEDED?

Timber harvesting, silvicultural practices and land clearing operations generate forest residues on thousands of acres in the Black Hills each year.

Although some residues are beneficial for such purposes as nutrient cycling, soil protections, wildlife cover, and microclimate effect, excessive residues adversely affect the forest environment in many ways. Much of the forest contains residues in undetermined but excessive quantities from the standpoints of resource use, protection, and management. To reduce residues to a level considered desirable, estimates are needed on quantities that now exist or will be created by some activity.

Inventory techniques, such as the planar intersect method, are very useful when a high degree of accuracy is needed but are time consuming and costly to apply extensively. Photo series can be used to make fast, easy, and inexpensive quantifications of residue, adequate for most management needs.

There has been no way for all resource disciplines to become readily familiar with residue volumes and descriptions so that they can make quantitative inputs to residue management. Likewise, because fuel rating systems are specialized and subjective, they too are not readily adapted to other environmental components. These deficiencies can be overcome with the photo series.

HOW CAN THEY BE USED?

INVENTORY OF DOWN RESIDUE

Loadings in various residue size classes, average residue depth, and ground area covered are characteristics that are visible in the photographs; hence, users can estimate any of these characteristics on an area being inventoried by comparing them with the photos as follows:

1. Observe each characteristic of the residue on the ground (e.g., 3.1–to 9-inch loading).
2. Select a photo which nearly matches, or photos that bracket, the observed characteristic.
3. Obtain the quantitative value for the characteristic being estimated from the data sheet accompanying the selected photo (or interpolate a value between photos).

These steps are repeated for each characteristic desired. If the general area being inventoried has zones of obvious differences in residue loading, the user should consider making separate determinations for each zone, which can then be weighted and cumulated for the whole area.

Residue characteristics not distinguishable in the photographs are duff and litter depth, proportion of sound residue by species, and proportion rotted. If values for these characteristics are desired in an inventory, they must be derived from independent sampling or observations.

Inventory information can be used by land managers to (1) evaluate impacts residues have on various aspects of forest management, (2) identify areas of unacceptable residue loading, (3) identify priority areas for treatment, (4) estimate amount of utilizable material, and (5) predict fire behavior characteristics.

DETERMINATION OF DESIRED RESIDUE LEVEL

Land management objectives can be more nearly achieved if a team of appropriate specialists can participate in specifying residues which should remain on site after completion of a cutting activity. Individuals helping with these determinations can study the photo series to recognize the appearance of various quantities and distributions of residue. With this knowledge, each individual can describe in quantitative terms the residue he believes should be retained to meet environmental concerns and goals of his particular specialty. The group can then use the photo series as a communication tool to resolve differences in arriving at a desired level.

After treatment, the degree to which objectives were achieved can be judged by comparing observed posttreatment loading with the desired level description.

PREDICTION OF RESIDUES FROM PLANNED CUTTING AND RESIDUE CHANGES FROM TREATMENTS

Photo series are a rudimentary aid for predicting amounts of residue from cutting and residue changes from treatments. Many factors, such as condition of timber stand, topography, logging method, and utilization intensity, affect the volume of resulting residues, so users should bear in mind that these series depict only a few of the possible combinations.

To predict residue volumes from planned cutting, the user compares timber volume and size information from cutting plans with this kind of information in the photo series. Selecting a photo series level or levels with similar stand characteristics, the user refers to data sheet loadings, considers factors which differ from the photo series situations, and quantifies the loading expected.

Predicted loadings can be used to support changes in cutting and removal actions and to plan appropriate treatments.

To predict residue changes from treatments, the user studies the treated and untreated levels in the photo series to gain knowledge of relative changes or reductions affected by sample treatments. Then, comparing residue inventory or preharvest prediction information with levels in the series, the user determines the change a specific treatment may produce.

Predicted change in residue from treatments can aid in (1) identifying treatments that will reduce residues to the desired level, (2) selecting the most cost-effective treatments, and (3) estimating tons that will be consumed by fire. Improved accuracy in estimating tons consumed by fire will increase reliability of particulate and chemical compound emission calculations.

HOW WERE THEY DEVELOPED?

Areas photographed for these series were selected to show typical residue loading variations. Activity series show those from commonly applied harvest and cultural practices in major vegetative types of the Black Hills. Natural series show those in areas undisturbed by cutting for many years.

Photos were taken and data collected as follows:

1. Areas were photographed and the material in the photo area sampled in accordance with U.S. Forest Service national guidelines.[1]
2. Measurement technique was in accordance with the "Handbook for Inventorying Downed Woody Material."[2]

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[1] *USDA Forest Service. 1975. National fuel classification and inventory system preliminary draft. 61 p., illus. Washington Office, Washington, D.C.*

[2] *Brown, James K. 1974. Handbook for inventorying downed woody material. USDA For. Serv. Gen. Tech. Rep. INT-16,24 p., illus. Intermt. For. and Range Exp. Stn., Ogden, Utah.*

3. Timber stand, logging, and residue treatment information was obtained from timber sale or project records in field offices.
4. Sampling of live and standing vegetation for natural examples was in accordance with "Guidelines for Developing or Supplementing Natural Photo Series."

HOW ARE LEVELS IN THESE SERIES CODED?

The data for each level are presented on the page facing the photo. Picture and data pages have the same code for the residue situation shown. The code shows:

a. Order of rank from lightest loading to heaviest loading shown in the series of photographs.

b. Forest type, e.g., PP = Ponderosa pine, PPSP = Ponderosa pine-spruce.

c. Forest size class, where:

1 = 5-inch d.b.h.;
2 = 5- to 11-inch d.b.h.;
3 = 11- to 20-inch d.b.h.;
4 = 20-inch d.b.h.

Example: 3-PP-2-PC is the third photo in the series for ponderosa pine, 5 to 11 inch diameter trees, after harvest by partial cutting.

From Black Hills Photo Series

A-89-6-82

Google

PONDEROSA PINE

SIZE CLASS 1

PRECOMMERCIAL THINNING

A SERIES OF 7 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	.02	1
0.26-1.0	.3	18
1.1 - 3.0	1.5	98
Sub tot. tons <3"	1.82	---
3.1 - 9.0	4.6	369
9.1 -20.0	0	0
20.1+	0	0
Total	6.42	486

OTHER MEASUREMENTS

Average residue depth	(feet)	.1
Ground area covered by residue	(percent)	24
Average duff and litter depth	(inches)	.1
Ground area covered by duff and litter	(percent)	53
Sound residue 3.1-inch diameter and larger	(percent)	91
Rotten residue 3.1-inch diameter and larger	(percent)	9

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)

Net volume cruised (M fbm/acre)

Average stems/acre cut

Average d.b.h. of stems cut (inches)

Stand age (years)

Cutting prescription

Yarding method

Slash treatment

Period since cut or treatment (months)

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	660
Stems remaining/acre	160
Basal area/acre before	70
Basal area/acre after	30
Average d.b.h. before (inches)	4
Average d.b.h. after (inches)	5
Thinning method	Chain saw
Slash treatment	Broadcast burned

REMARKS

Exposure: East slope

FUEL MODEL

NFDRS	H
Fire Behavior	8

DATA SHEET

Residue descriptive code 2-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	.08	4
0.26- 1.0	1.2	73
1.1 - 3.0	3.3	216
Sub tot.tons <3"	4.58	---
3.1 - 9.0	6.3	505
9.1 -20.0	.5	40
20.1+	0	0
Total	11.38	838

OTHER MEASUREMENTS

Average residue depth	(feet)	.1
Ground area covered by residue	(percent)	40
Average duff and litter depth	(inches)	.8
Ground area covered by duff and litter	(percent)	96
Sound residue 3.1-inch diameter and larger	(percent)	81
Rotten residue 3.1-inch diameter and larger	(percent)	19

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) ______
Net volume cruised (M fbm/acre) ______
Average stems/acre cut ______
Average d.b.h. of stems cut (inches) ______
Stand age (years) ______
Cutting prescription ______
Yarding method ______
Slash treatment ______
Period since cut or treatment (months) ______

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre 2680
Stems remaining/acre 480
Basal area/acre before (Est.) 196
Basal area/acre after (Est.) 65
Average d.b.h. before (inches) 3
Average d.b.h. after (inches) 5
Thinning method Chain saw
Slash treatment Broadcast burned

REMARKS

Exposure: South slope

FUEL MODEL

NFDRS	H
Fire Behavior	8

DATA SHEET

Residue descriptive code 3-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.13	7
0.26- 1.0	2.3	139
1.1 - 3.0	3.2	209
Sub tot.tons <3"	5.63	---
3.1 - 9.0	10.3	825
9.1 -20.0	0	0
20.1+	0	0
Total	15.93	1180

OTHER MEASUREMENTS

Average residue depth	(feet)	.3
Ground area covered by residue	(percent)	60
Average duff and litter depth	(inches)	.6
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	98
Rotten residue 3.1-inch diameter and larger	(percent)	2

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)

Net volume cruised (M fbm/acre)

Average stems/acre cut

Average d.b.h. of stems cut (inches)

Stand age (years)

Cutting prescription

Yarding method

Slash treatment

Period since cut or treatment (months)

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	1800
Stems remaining/acre	240
Basal area/acre before (Est.)	109
Basal area/acre after (Est.)	21
Average d.b.h. before (inches)	3
Average d.b.h. after (inches)	4
Thinning method Chain saw	
Slash treatment Cat crushed	

REMARKS

Exposure: North slope

FUEL MODEL

NFDRS	K
Fire Behavior	11

DATA SHEET

Residue descriptive code 4-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.23	13
0.26- 1.0	3.1	187
1.1 - 3.0	3.9	255
Sub tot. tons <3"	7.23	---
3.1 - 9.0	8.9	713
9.1 -20.0	.9	72
20.1+	0	0
Total	17.03	1240

OTHER MEASUREMENTS

Average residue depth	(feet)	.4
Ground area covered by residue	(percent)	92
Average duff and litter depth	(inches)	1.6
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	74
Rotten residue 3.1-inch diameter and larger	(percent)	26

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)

Net volume cruised (M fbm/acre)

Average stems/acre cut

Average d.b.h. of stems cut (inches)

Stand age (years)

Cutting prescription

Yarding method

Slash treatment

Period since cut or treatment (months)

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	1680
Stems remaining/acre	120
Basal area/acre before	180
Basal area/acre after	35
Average d.b.h. before (inches)	3
Average d.b.h. after (inches)	5
Thinning method	Chain saw
Slash treatment	Lop and scatter

REMARKS

Exposure: West slope

FUEL MODEL

NFDRS	J
Fire Behavior	11

DATA SHEET

Residue descriptive code 5-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.32	18
0.26-1.0	2.4	145
1.1 - 3.0	8.3	543
Sub tot.tons <3"	11.02	---
3.1 - 9.0	7.2	577
9.1 -20.0	0	0
20.1+	0	0
Total	18.22	1283

OTHER MEASUREMENTS

Average residue depth	(feet)	.5
Ground area covered by residue	(percent)	73
Average duff and litter depth	(inches)	1.0
Ground area covered by duff and litter	(percent)	92
Sound residue 3.1-inch diameter and larger	(percent)	100
Rotten residue 3.1-inch diameter and larger	(percent)	0

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) ______

Net volume cruised (M fbm/acre) ______

Average stems/acre cut ______

Average d.b.h. of stems cut (inches) ______

Stand age (years) ______

Cutting prescription ______

Yarding method ______

Slash treatment ______

Period since cut or treatment (months) ______

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre 4180

Stems remaining/acre 300

Basal area/acre before (Est.) 246

Basal area/acre after (Est.) 41

Average d.b.h. before (inches) 3

Average d.b.h. after (inches) 5

Thinning method Chain saw

Slash treatment Cat crushed

REMARKS

Exposure: South slope

FUEL MODEL

NFDRS J

Fire Behavior 12

DATA SHEET

Residue descriptive code 6-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.23	13
0.26- 1.0	3.8	230
1.1 - 3.0	3.9	255
Sub tot.tons <3"	7.93	---
3.1 - 9.0	10.3	825
9.1 -20.0	.6	48
20.1+	0	0
Total	18.83	1371

OTHER MEASUREMENTS

Average residue depth	(feet)	.5
Ground area covered by residue	(percent)	95
Average duff and litter depth	(inches)	1.8
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	94
Rotten residue 3.1-inch diameter and larger	(percent)	6

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)

Net volume cruised (M fbm/acre)

Average stems/acre cut

Average d.b.h. of stems cut (inches)

Stand age (years)

Cutting prescription

Yarding method

Slash treatment

Period since cut or treatment (months)

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	620
Stems remaining/acre	200
Basal area/acre before	160
Basal area/acre after	55
Average d.b.h. before (inches)	4
Average d.b.h. after (inches)	6
Thinning method	Chain saw
Slash treatment	Lop and scatter

REMARKS

Exposure: South slope

FUEL MODEL

NFDRS	J
Fire Behavior	11

DATA SHEET

Residue descriptive code 7-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.56	31
0.26- 1.0	10.2	617
1.1 - 3.0	21.5	1406
Sub tot.tons <3"	32.26	---
3.1 - 9.0	14.8	1186
9.1 -20.0	0	0
20.1+	0	0
Total	47.06	3240

OTHER MEASUREMENTS

Average residue depth	(feet)	1.5
Ground area covered by residue	(percent)	100
Average duff and litter depth	(inches)	2.3
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	95
Rotten residue 3.1-inch diameter and larger	(percent)	5

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) ______

Net volume cruised (M fbm/acre) ______

Average stems/acre cut ______

Average d.b.h. of stems cut (inches) ______

Stand age (years) ______

Cutting prescription ______

Yarding method ______

Slash treatment ______

Period since cut or treatment (months) ______

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	4000
Stems remaining/acre	340
Basal area/acre before	200
Basal area/acre after	95
Average d.b.h. before (inches)	3
Average d.b.h. after (inches)	6

Thinning method Chain saw

Slash treatment Lop and scatter

REMARKS

Exposure: South slope

FUEL MODEL

NFDRS	I
Fire Behavior	13

PONDEROSA PINE

SIZE CLASS 2

PARTIAL CUT

A SERIES OF 5 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-PP-2-PC (Shelterwood)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	.10	6
0.26- 1.0	1.5	91
1.1 - 3.0	2.4	157
Sub tot. tons <3"	4.00	---
3.1 - 9.0	.2	16
9.1 -20.0	0	0
20.1+	0	0
Total	4.20	270

OTHER MEASUREMENTS

Average residue depth	(feet)	.1
Ground area covered by residue	(percent)	44
Average duff and litter depth	(inches)	1.0
Ground area covered by duff and litter	(percent)	85
Sound residue 3.1-inch diameter and larger	(percent)	100
Rotten residue 3.1-inch diameter and larger	(percent)	0

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 9.0

Net volume cruised (M fbm/acre) 8.2

Average stems/acre cut 230

Average d.b.h. of stems cut (inches) 9.6

Stand age (years) 95

Cutting prescription Shelterwood

Yarding method Rubber-tired skidder

Slash treatment Machine piled

Period since cut or treatment (months) 18

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: East slope

Loading sampled does not include slash in the piles which are visible in background of the photo.

Piles are planned for burning at a later date.

FUEL MODEL

NFDRS	H
Fire Behavior	8

DATA SHEET

Residue descriptive code 2-PP-2PC (Prep cut)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.11	6
0.26- 1.0	1.4	85
1.1 - 3.0	2.8	183
Sub tot. tons <3"	4.31	---
3.1 - 9.0	2.5	200
9.1 -20.0	0	0
20.1+	0	0
Total	6.81	474

OTHER MEASUREMENTS

Average residue depth (feet) .2

Ground area covered by residue (percent) 45

Average duff and litter depth (inches) .8

Ground area covered by duff and litter (percent) 92

Sound residue 3.1-inch diameter and larger (percent) 92

Rotten residue 3.1-inch diameter and larger (percent) 8

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 6.6

Net volume cruised (M fbm/acre) 5.9

Average stems/acre cut 70

Average d.b.h. of stems cut (inches) 8

Stand age (years) 90

Cutting prescription Preparation cut

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 4

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

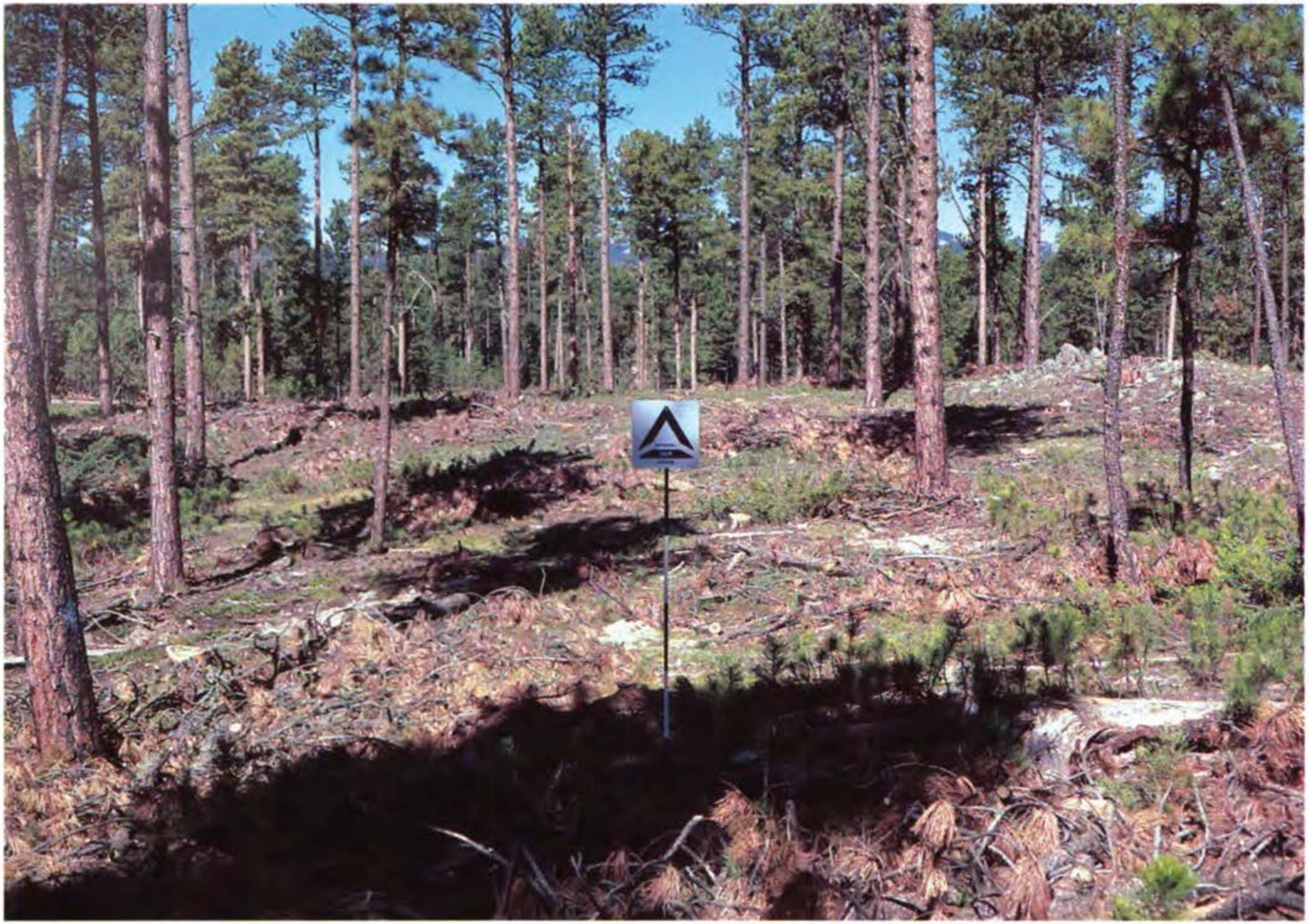
REMARKS

Exposure: East slope

FUEL MODEL

NFDRS K

Fire Behavior 11



DATA SHEET

Residue descriptive code 3-PP-2-PC (Seed tree)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.12	7
0.26- 1.0	2.0	121
1.1 - 3.0	3.2	209
Sub tot.tons <3"	5.32	---
3.1 - 9.0	2.9	232
9.1 - 20.0	0	0
20.1+	0	0
Total	8.22	569

OTHER MEASUREMENTS

Average residue depth	(feet)	.2
Ground area covered by residue	(percent)	53
Average duff and litter depth	(inches)	.6
Ground area covered by duff and litter	(percent)	79
Sound residue 3.1-inch diameter and larger	(percent)	100
Rotten residue 3.1-inch diameter and larger	(percent)	0

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 6.3

Net volume cruised (M fbm/acre) 5.7

Average stems/acre cut 80

Average d.b.h. of stems cut (inches) 10

Stand age (years) 90

Cutting prescription Seed tree

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 4

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

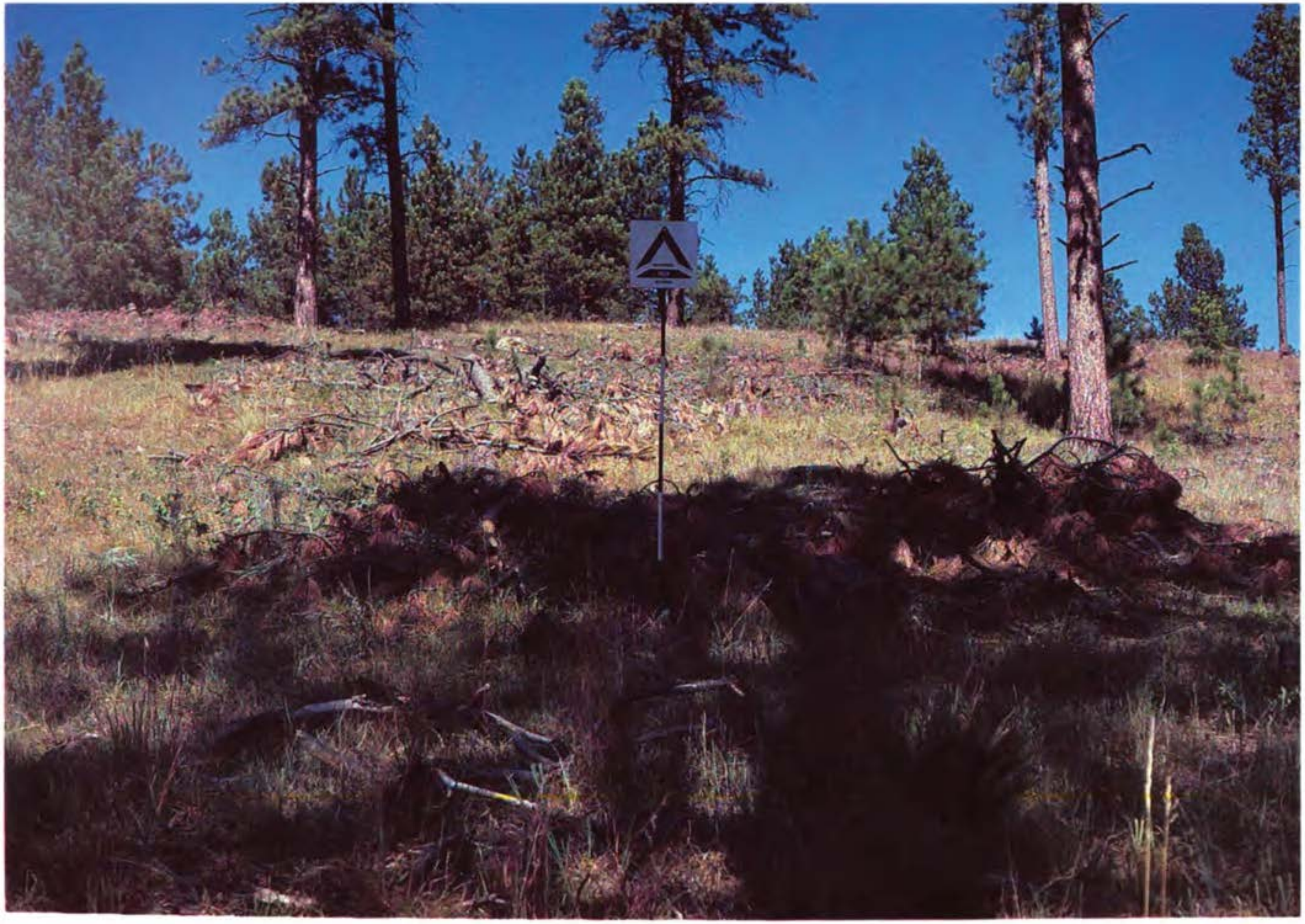
REMARKS

Exposure: West slope

FUEL MODEL

NFDRS K

Fire Behavior 11



DATA SHEET

Residue descriptive code 4-PP-2-PC (Seed tree)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.13	7
0.26- 1.0	2.7	163
1.1 - 3.0	4.3	281
Sub tot.tons <3"	7.13	---
3.1 - 9.0	3.4	272
9.1 -20.0	1.4	112
20.1+	0	0
Total	11.93	835

OTHER MEASUREMENTS

Average residue depth	(feet)	.3
Ground area covered by residue	(percent)	59
Average duff and litter depth	(inches)	1.2
Ground area covered by duff and litter	(percent)	99
Sound residue 3.1-inch diameter and larger	(percent)	71
Rotten residue 3.1-inch diameter and larger	(percent)	29

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 4.8

Net volume cruised (M fbm/acre) 4.3

Average stems/acre cut 40

Average d.b.h. of stems cut (inches) 10

Stand age (years) 200

Cutting prescription Seed tree

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 4

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: South slope

FUEL MODEL

NFDRS K

Fire Behavior 11

DATA SHEET

Residue descriptive code 5-PP-2-PC (Intermediate)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.35	20
0.26- 1.0	7.6	460
1.1 - 3.0	4.6	301
Sub tot. tons<3"	12.55	---
3.1 - 9.0	10.3	825
9.1 - 20.0	2.0	160
20.1+	0	0
Total	24.85	1766

OTHER MEASUREMENTS

Average residue depth	(feet)	.6
Ground area covered by residue	(percent)	97
Average duff and litter depth	(inches)	2.0
Ground area covered by duff and litter	(percent)	96
Sound residue 3.1-inch diameter and larger	(percent)	77
Rotten residue 3.1-inch diameter and larger	(percent)	23

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 6.4

Net volume cruised (M fbm/acre) 5.8

Average stems/acre cut 120

Average d.b.h. of stems cut (inches) 10

Stand age (years) 80

Cutting prescription Intermediate

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 5

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: West slope

FUEL MODEL

NFDRS J

Fire Behavior 12

PONDEROSA PINE

SIZE CLASS 3

PARTIAL CUT

A SERIES OF 3 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-PP-3-PC (Shelterwood)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.05	3
0.26- 1.0	.7	42
1.1 - 3.0	1.9	124
Sub tot.tons <3"	2.65	---
3.1 - 9.0	1.7	136
9.1 -20.0	.8	64
20.1+	0	0
Total	5.15	369

OTHER MEASUREMENTS

Average residue depth	(feet)	.1
Ground area covered by residue	(percent)	34
Average duff and litter depth	(inches)	.5
Ground area covered by duff and litter	(percent)	65
Sound residue 3.1-inch diameter and larger	(percent)	100
Rotten residue 3.1-inch diameter and larger	(percent)	0

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)	6.0
Net volume cruised (M fbm/acre)	5.4
Average stems/acre cut	100
Average d.b.h. of stems cut (inches)	12
Stand age (years)	200
Cutting prescription Shelterwood	
Yarding method Rubber-tired skidder	
Slash treatment Broadcast burned	
Period since cut or treatment (months)	12

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	
Stems remaining/acre	
Basal area/acre before	
Basal area/acre after	
Average d.b.h. before (inches)	
Average d.b.h. after (inches)	
Thinning method	
Slash treatment	

REMARKS

Exposure: West slope

Primary carrier of fire is grass.

FUEL MODEL

NFDRS	C
Fire Behavior	2

DATA SHEET

Residue descriptive code 2-PP-3-PC (Intermediate)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.28	16
0.26- 1.0	3.3	200
1.1 - 3.0	3.7	242
Sub tot.tons <3"	7.28	---
3.1 - 9.0	5.6	449
9.1 -20.0	.9	72
20.1+	0	0
Total	13.78	979

OTHER MEASUREMENTS

Average residue depth	(feet)	.3
Ground area covered by residue	(percent)	72
Average duff and litter depth	(inches)	1.2
Ground area covered by duff and litter	(percent)	96
Sound residue 3.1-inch diameter and larger	(percent)	91
Rotten residue 3.1-inch diameter and larger	(percent)	9

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 15

Net volume cruised (M fbm/acre) 13.5

Average stems/acre cut 75

Average d.b.h. of stems cut (inches) 11.1

Stand age (years) 67

Cutting prescription Intermediate

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 6

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: East slope

FUEL MODEL

NFDRS	K
Fire Behavior	11

DATA SHEET

Residue descriptive code 3-PP-3-PC (Overstory removal)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.20	11
0.26- 1.0	3.1	187
1.1 - 3.0	4.0	262
Sub tot. tons <3"	7.30	---
3.1 - 9.0	6.3	505
9.1 -20.0	2.9	232
20.1+	0	0
Total	16.50	1197

OTHER MEASUREMENTS

Average residue depth	(feet)	.4
Ground area covered by residue	(percent)	66
Average duff and litter depth	(inches)	1.6
Ground area covered by duff and litter	(percent)	93
Sound residue 3.1-inch diameter and larger	(percent)	77
Rotten residue 3.1-inch diameter and larger	(percent)	23

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 5.7

Net volume cruised (M fbm/acre) 5.1

Average stems/acre cut 100

Average d.b.h. of stems cut (inches) 12

Stand age (years) 200

Cutting prescription Overstory removal

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 2

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: West slope

FUEL MODEL

NFDRS	K
Fire Behavior	11

PONDEROSA PINE

SIZE CLASS 3

CLEARCUT

A SERIES OF 2 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-PP-3-CC

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	.09	5
0.26- 1.0	1.2	73
1.1 - 3.0	3.0	196
Sub tot. tons <3"	4.29	---
3.1 - 9.0	5.5	441
9.1 -20.0	.6	48
20.1+	0	0
Total	10.39	763

OTHER MEASUREMENTS

Average residue depth	(feet)	.2
Ground area covered by residue	(percent)	44
Average duff and litter depth	(inches)	.8
Ground area covered by duff and litter	(percent)	97
Sound residue 3.1-inch diameter and larger	(percent)	82
Rotten residue 3.1-inch diameter and larger	(percent)	18

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 2.7

Net volume cruised (M fbm/acre) 2.4

Average stems/acre cut 27

Average d.b.h. of stems cut (inches) 11.4

Stand age (years) 73

Cutting prescription Clearcut

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 5

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

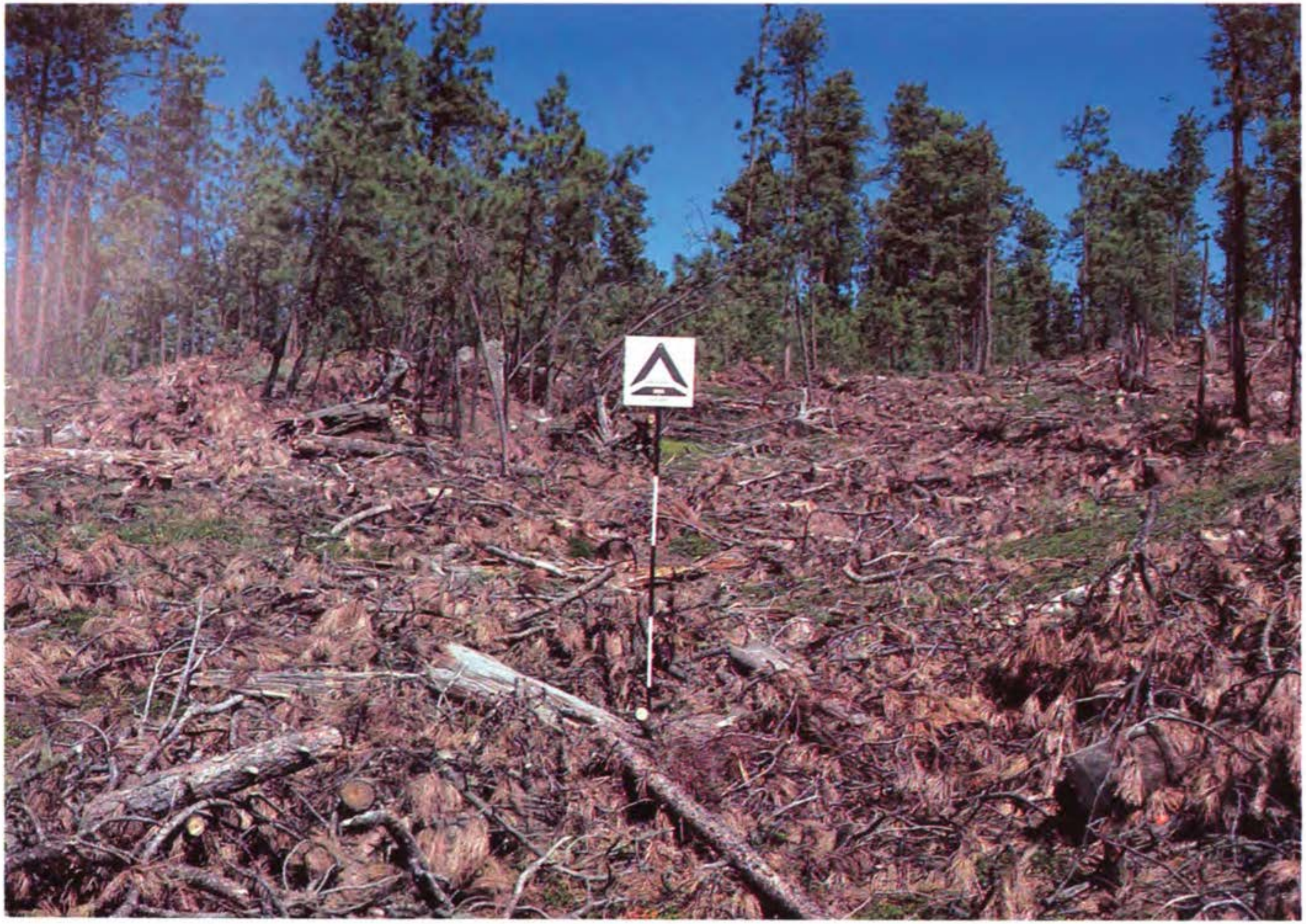
REMARKS

Exposure: East slope

Primary carrier of fire is grass.

FUEL MODEL

NFDRS	C
Fire Behavior	2



DATA SHEET

Residue descriptive code 2-PP-3-CC

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.32	18
0.26- 1.0	2.5	151
1.1 - 3.0	6.9	451
Sub tot.tons <3"	9.72	---
3.1 - 9.0	11.5	921
9.1 -20.0	1.9	152
20.1+	0	0
Total	23.12	1693

OTHER MEASUREMENTS

Average residue depth	(feet)	.5
Ground area covered by residue	(percent)	73
Average duff and litter depth	(inches)	1.4
Ground area covered by duff and litter	(percent)	96
Sound residue 3.1-inch diameter and larger	(percent)	86
Rotten residue 3.1-inch diameter and larger	(percent)	14

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 5.9

Net volume cruised (M fbm/acre) 5.3

Average stems/acre cut 140

Average d.b.h. of stems cut (inches) 12

Stand age (years) 130

Cutting prescription Clearcut

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 3

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: South slope

FUEL MODEL

NFDRS	J
Fire Behavior	12

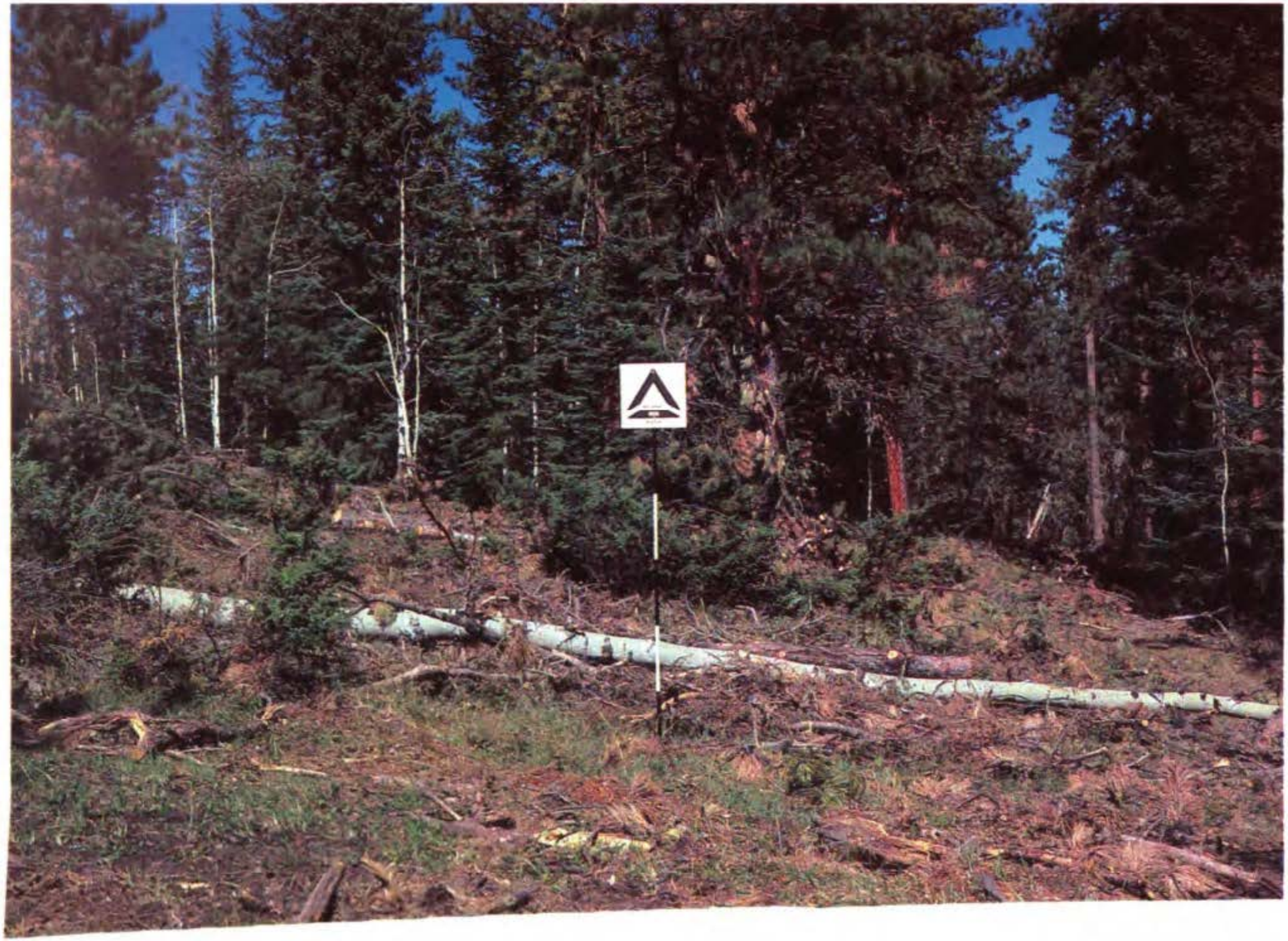
SIZE CLASS 3

PARTIAL CUT

A SERIES OF 3 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



Residue descriptive code 1-PPSP-3-PC (Shelterwood)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	.58	33
0.26- 1.0	3.3	200
1.1 - 3.0	4.6	301
Sub tot.tons <3"	8.48	---
3.1 - 9.0	5.2	417
9.1 -20.0	1.6	128
20.1+	0	0
Total	15.28	1079

OTHER MEASUREMENTS

Average residue depth	(feet)	.5
Ground area covered by residue	(percent)	75
Average duff and litter depth	(inches)	1.2
Ground area covered by duff and litter	(percent)	98
Sound residue 3.1-inch diameter and larger	(percent)	66
Rotten residue 3.1-inch diameter and larger	(percent)	34

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 3.5

Net volume cruised (M fbm/acre) 3.1

Average stems/acre cut 27

Average d.b.h. of stems cut (inches) 16

Stand age (years) 100

Cutting prescription Shelterwood

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 3

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: East slope

FUEL MODEL

NFDRS K

Fire Behavior 11

Residue descriptive code Z-PPSP-3-PC (Tree selection)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.60	34
0.26- 1.0	5.5	333
1.1 - 3.0	8.5	556
Sub tot. tons <3"	14.60	---
3.1 - 9.0	9.9	793
9.1 -20.0	.9	72
20.1+	0	0
Total	25.40	1788

OTHER MEASUREMENTS

Average residue depth	(feet)	.5
Ground area covered by residue	(percent)	87
Average duff and litter depth	(inches)	2.1
Ground area covered by duff and litter	(percent)	99
Sound residue 3.1-inch diameter and larger	(percent)	93
Rotten residue 3.1-inch diameter and larger	(percent)	7

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)	6.4
Net volume cruised (M fbm/acre)	5.8
Average stems/acre cut	67
Average d.b.h. of stems cut (inches)	13
Stand age (years)	90
Cutting prescription Tree selection	
Yarding method Rubber-tired skidder	
Slash treatment Lop and scatter	
Period since cut or treatment (months)	3

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	
Stems remaining/acre	
Basal area/acre before	
Basal area/acre after	
Average d.b.h. before (inches)	
Average d.b.h. after (inches)	
Thinning method	
Slash treatment	

REMARKS

Exposure: East slope

FUEL MODEL

NFDRS	J
Fire Behavior	12

DATA SHEET

Residue descriptive code 3-PPSP-3-PC (Shelterwood)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.76	43
0.26-1.0	4.9	296
1.1 - 3.0	7.5	490
Sub tot. tons <3"	13.16	---
3.1 - 9.0	15.1	1210
9.1 -20.0	6.8	545
20.1+	0	0
Total	35.06	2584

OTHER MEASUREMENTS

Average residue depth	(feet)	1.0
Ground area covered by residue	(percent)	91
Average duff and litter depth	(inches)	2.9
Ground area covered by duff and litter	(percent)	98
Sound residue 3.1-inch diameter and larger	(percent)	71
Rotten residue 3.1-inch diameter and larger	(percent)	29

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)	6.8
Net volume cruised (M fbm/acre)	6.1
Average stems/acre cut	52
Average d.b.h. of stems cut (inches)	16
Stand age (years)	100
Cutting prescription Shelterwood	
Yarding method Rubber-tired skidder	
Slash treatment Lop and scatter	
Period since cut or treatment (months)	3

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: North slope

FUEL MODEL

NFDRS	I
Fire Behavior	13

SPRUCE

SIZE CLASS 3

PARTIAL CUT

A SERIES OF 2 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-SP-3-PC (Tree selection)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.58	33
0.26- 1.0	3.2	193
1.1 - 3.0	5.0	327
Sub tot. tons <3"	8.78	---
3.1 - 9.0	4.7	377
9.1 -20.0	5.4	432
20.1+	0	0
Total	18.88	1362

OTHER MEASUREMENTS

Average residue depth	(feet)	.6
Ground area covered by residue	(percent)	81
Average duff and litter depth	(inches)	1.7
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	67
Rotten residue 3.1-inch diameter and larger	(percent)	33

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 2.9

Net volume cruised (M fbm/acre) 2.6

Average stems/acre cut 30

Average d.b.h. of stems cut (inches) 13

Stand age (years) 90

Cutting prescription Tree selection

Yarding method Rubber-tired skidder

Slash treatment Lop and scatter

Period since cut or treatment (months) 3

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre

Stems remaining/acre

Basal area/acre before

Basal area/acre after

Average d.b.h. before (inches)

Average d.b.h. after (inches)

Thinning method

Slash treatment

REMARKS

Exposure: East slope

FUEL MODEL

NFDRS	J
Fire Behavior	11

Residue descriptive code 2-SP-3-PC (Tree selection)

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	.90	51
0.26- 1.0	4.6	278
1.1 - 3.0	7.9	517
Sub tot.tons <3"	13.40	---
3.1 - 9.0	19.5	1562
9.1 -20.0	8.0	641
20.1+	0	0
Total	40.90	3049

OTHER MEASUREMENTS

Average residue depth	(feet)	.8
Ground area covered by residue	(percent)	89
Average duff and litter depth	(inches)	3.1
Ground area covered by duff and litter	(percent)	99
Sound residue 3.1-inch diameter and larger	(percent)	73
Rotten residue 3.1-inch diameter and larger	(percent)	27

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)	6.5
Net volume cruised (M fbm/acre)	5.8
Average stems/acre cut	68
Average d.b.h. of stems cut (inches)	13
Stand age (years)	90
Cutting prescription	Tree selection
Yarding method	Rubber-tired skidder
Slash treatment	Lop and scatter
Period since cut or treatment (months)	3

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	
Stems remaining/acre	
Basal area/acre before	
Basal area/acre after	
Average d.b.h. before (inches)	
Average d.b.h. after (inches)	
Thinning method	
Slash treatment	

REMARKS

Exposure: North slope

Primary fire carrier is dead and down material, little recent logging slash.

FUEL MODEL

NFDRS	G
Fire Behavior	10

PONDEROSA PINE

SIZE CLASS 1

NATURAL

1 LEVEL

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-PP-1

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.12	7
0.26- 1.0	.5	30
1.1 - 3.0	.6	39
Sub. tot. tons<3"	1.22	--
3.1 - 9.0	2.8	224
9.1 -20.0	0	0
20.1+	0	0
Total	4.02	300

OTHER MEASUREMENTS

Average residue depth	(feet)	.03
Ground area covered by residue	(percent)	12
Average duff and litter depth	(inches)	1.6
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	82
Rotten residue 3.1-inch diameter and larger	(percent)	18

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species --
Trees per acre 0
Average d.b.h. (inches) 0
Average tree height (feet) 0
Average crown height (feet) 0
Estimated crown space occupied (percent) 0

Trees and dead stems under 8-inch d.b.h.

Dominant species Ponderosa pine
Trees per acre 4000
Average d.b.h. (inches) 2
Average tree height (feet) 13.1
Average crown height (feet) 8.4
Estimated crown space occupied (percent) 80

Trees 8- to 20-inch d.b.h.

Dominant species --
Trees per acre 0
Average d.b.h. (inches) 0
Average tree height (feet) 0
Average crown height (feet) 0
Estimated crown space 0

Snags 8-inch d.b.h. and over

Number per acre 0
Average d.b.h. 0
Average height 0

BRUSH INFORMATION

Dominant species --
Average height (inches) 0
Average crown height (inches) 0
Ground space occupied (percent) 0

GRASS AND FORBS INFORMATION

Dominant species --
Average height (inches) 0
Ground space (percent) 0
Estimated weight (pound per acre) 0

REMARKS

Exposure: south slope

FUEL MODEL

NFDRS	U
Fire Behavior	9

PONDEROSA PINE

SIZE CLASS 2

NATURAL

A SERIES OF 2 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-PP-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	.05	3
0.26- 1.0	1.0	60
1.1 - 3.0	1.1	72
Sub. tot. tons<3"	2.15	--
3.1 - 9.0	1.6	128
9.1 -20.0	0	0
20.1±	0	0
Total	3.75	263

OTHER MEASUREMENTS

Average residue depth	(feet)	.1
Ground area covered by residue	(percent)	40
Average duff and litter depth	(inches)	1.2
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	63
Rotten residue 3.1-inch diameter and larger	(percent)	37

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species --

Trees per acre 0

Average d.b.h. (inches) 0

Average tree height (feet) 0

Average crown height (feet) 0

Estimated crown space occupied (percent)

Trees 8- to 20-inch d.b.h.

Dominant species Pond. pine

Trees per acre 203

Average d.b.h. (inches) 10.4

Average tree height (feet) 45

Average crown height (feet) 22

Estimated crown space 70

Trees and dead stems under 8-inch d.b.h.

Dominant species Ponderosa pine

Trees per acre 300

Average d.b.h. (inches) 6.5

Average tree height (feet) 36

Average crown height (feet) 17

Estimated crown space occupied (percent) 15

Snags 8-inch d.b.h. and over

Number per acre 0

Average d.b.h. 0

Average height 0

BRUSH INFORMATION

Dominant species Snowberry

Average height (inches) 7

Average crown height (inches) --

Ground space occupied (percent) 16

GRASS AND FORBS INFORMATION

Dominant species Perennial grass

Average height (inches) 7

Ground space (percent) 2

Estimated weight (pound per acre) 50

REMARKS

Exposure: northwest slope

Primary carrier of fire - pine needles

FUEL MODEL

NFDRS U

Fire behavior 9

DATA SHEET

Residue descriptive code 2-PP-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.14	8
0.26- 1.0	.3	18
1.1 - 3.0	.4	26
Sub. tot. tons<3"	.84	--
3.1 - 9.0	1.6	128
9.1 -20.0	2.2	176
20.1+	3.6	288
Total	8.24	644

OTHER MEASUREMENTS

Average residue depth	(feet)	.01
Ground area covered by residue	(percent)	0
Average duff and litter depth	(inches)	1.1
Ground area covered by duff and litter	(percent)	99
Sound residue 3.1-inch diameter and larger	(percent)	99
Rotten residue 3.1-inch diameter and larger	(percent)	1

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species --
Trees per acre 0
Average d.b.h. (inches) 0
Average tree height (feet) 0
Average crown height (feet) 0
Estimated crown space occupied (percent) 0

Trees and dead stems under 8-inch d.b.h.

Dominant species Ponderosa pine
Trees per acre 350
Average d.b.h. (inches) 2.6
Average tree height (feet) 18.0
Average crown height (feet) 9.3
Estimated crown space occupied (percent) 20

Trees 8- to 20-inch d.b.h.

Dominant species Pond. pine
Trees per acre 203
Average d.b.h. (inches) 9
Average tree height (feet) 50
Average crown height (feet) 30
Estimated crown space 70

Snags 8-inch d.b.h. and over

Number per acre 0
Average d.b.h. 0
Average height 0

BRUSH INFORMATION

Dominant species --
Average height (inches) 0
Average crown height (inches) 0
Ground space occupied (percent) 0

GRASS AND FORBS INFORMATION

Dominant species Perennial grass
Average height (inches) 7
Ground space (percent) 12
Estimated weight (pound per acre) 200

REMARKS

Exposure: west slope

FUEL MODEL

NFDRS C

Fire behavior 2

PONDEROSA PINE

SIZE CLASS 3

NATURAL

1 LEVEL

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

DATA SHEET

Residue descriptive code 1-PP-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	.04	2
0.26- 1.0	.5	30
1.1 - 3.0	1.2	78
Sub. tot. tons<3"	1.74	--
3.1 - 9.0	2.9	232
9.1 -20.0	0	0
20.1+	0	0
Total	4.64	342

OTHER MEASUREMENTS

Average residue depth	(feet)	.04
Ground area covered by residue	(percent)	11
Average duff and litter depth	(inches)	1.7
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	76
Rotten residue 3.1-inch diameter and larger	(percent)	24

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species --

Trees per acre 0

Average d.b.h. (inches) 0

Average tree height (feet) 0

Average crown height (feet) 0

Estimated crown space occupied (percent) 0

Trees and dead stems under 8-inch d.b.h.

Dominant species Ponderosa pine

Trees per acre 150

Average d.b.h. (inches) 6.6

Average tree height (feet) 37

Average crown height (feet) 16

Estimated crown space occupied (percent) 10

Trees 8- to 20-inch d.b.h.

Dominant species Pond. pine

Trees per acre 129

Average d.b.h. (inches) 11.5

Average tree height (feet) 69

Average crown height (feet) 38

Estimated crown space 60

Snags 8-inch d.b.h. and over

Number per acre 0

Average d.b.h. 0

Average height 0

BRUSH INFORMATION

Dominant species Kinnikinnic

Average height (inches) 3.6

Average crown height (inches) 0

Ground space occupied (percent) 35

GRASS AND FORBS INFORMATION

Dominant species Perennial grass

Average height (inches) 8

Ground space (percent) 20

Estimated weight (pound per acre) 250

REMARKS

Exposure: east slope

FUEL MODEL

NFDRS	C
Fire behavior	2

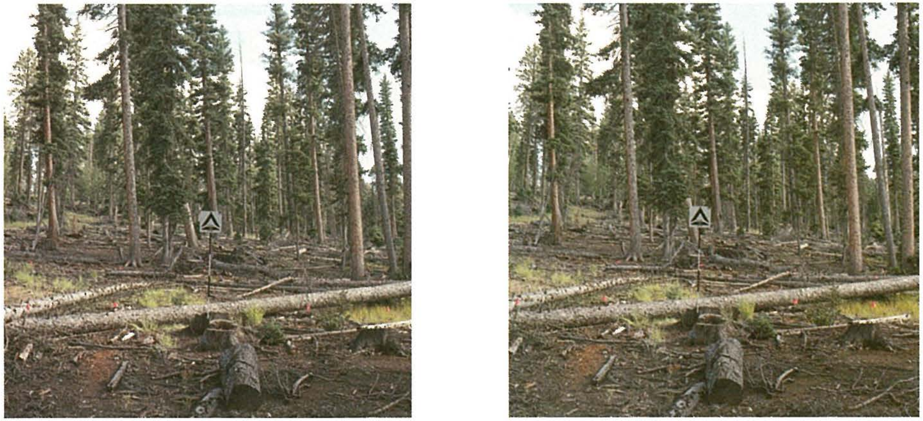
SERIES 1-AZ-PPSP-PRE

ARIZONA PONDEROSA PINE AND SPRUCE

PRE-BURN

A supplemental series of 04 levels to the Photo Series for Quantifying Forest Residues in the Black Hills Ponderosa Pine Type, Spruce Type

STEREO PAIR: 1-AZ-PPSP-PRE-01 - D



ADDITIONAL FUEL INFORMATION

Sound residue >3 inch diameter:	E. Spruce	31%	Average residue depth:	0.3 ft
	True fir	9%	Average duff depth:	1.3 in
	Other	17%	Average litter depth	0.1 in
Rotted residue >3 inch diameter:		43%		

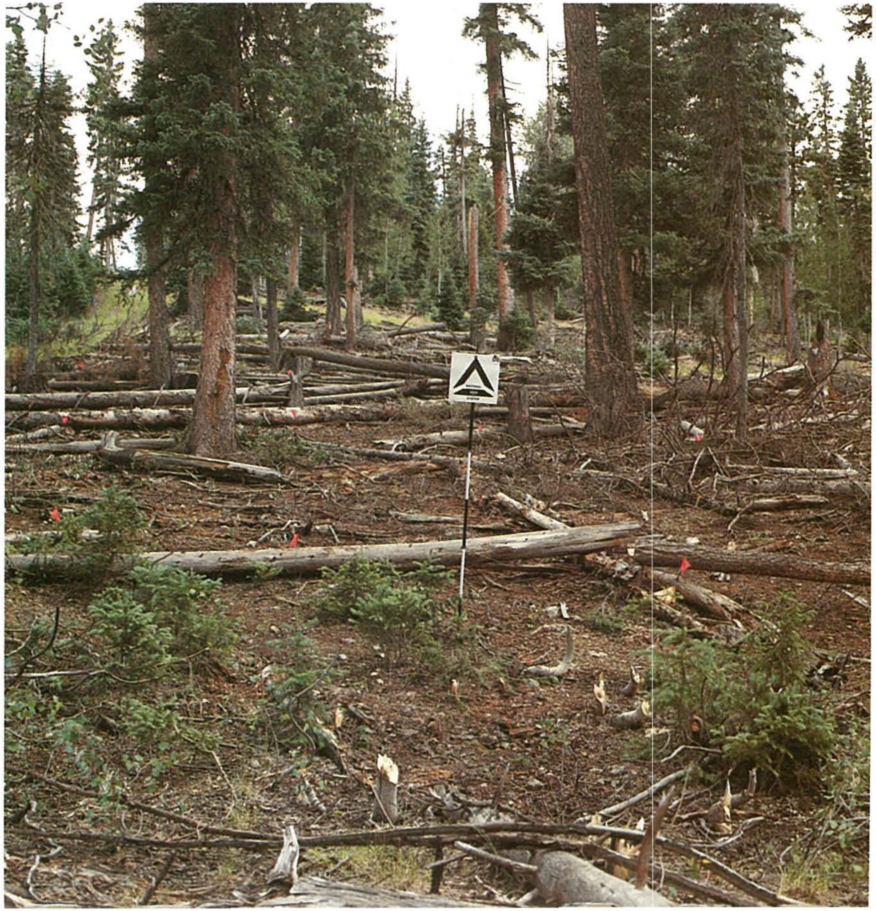
Percent residue >3 inch diameter is based on number of logs.

SERIES 1-AZ-PPSP-PRE-02 - D

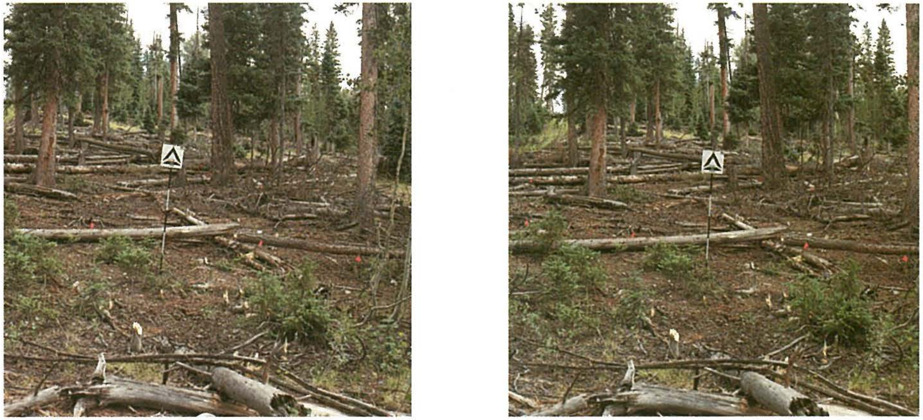
DOWN AND DEAD WOODY FUEL LOADING

Size class (in)	Load (tons/acre)	Mean diam.[a] - - (in) - - sound	rot
0.0-0.25	1.0	0.1	
0.26-1.0	1.6	.5	
1.1-3.0	2.2	1.5	
Subtotal 0-3 in	**4.8**		
3.1-9.0	18.3	5.9	5.2
9.1-20.0	20.8	11.7	11.4
>20.0	0.0	0.0	
Subtotal >3 in	**39.1**	**8.1**	**6.2**
TOTAL	**43.9**		

[a] Mean diam.=quadratic mean.



STEREO PAIR: 1-AZ-PPSP-PRE-02 - D



ADDITIONAL FUEL INFORMATION

Sound residue >3 inch diameter:	E. Spruce	25%	Average residue depth:	0.4 ft
	True fir	4%	Average duff depth:	1.4 in
	Other	17%	Average litter depth:	0.2 in
Rotted residue >3 inch diameter:		54%		

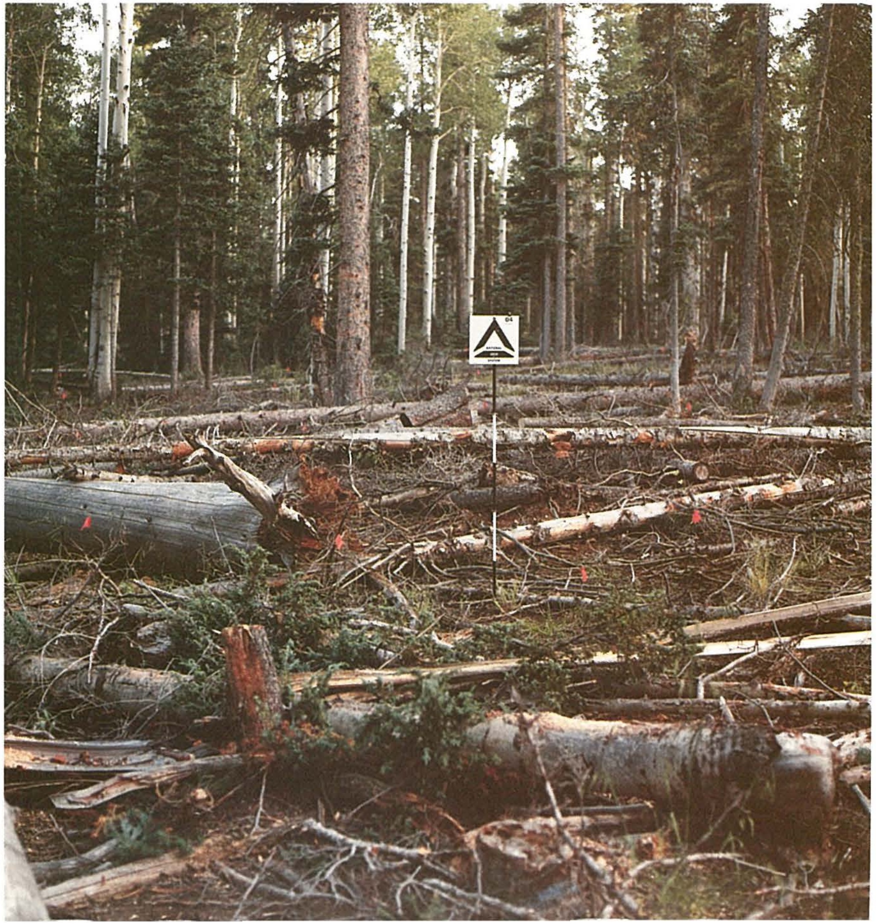
Percent residue >3 inch diameter is based on number of logs.

SERIES 1-AZ-PPSP-PRE-03 -D

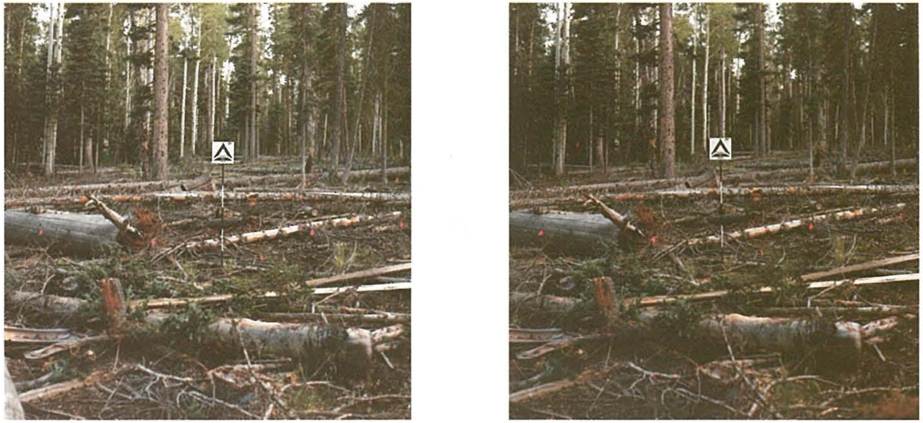
DOWN AND DEAD WOODY FUEL LOADING

Size class (in)	Load (tons/acre)	Mean diam.[a] - -(in)- - sound	rot
0.0-0.25	1.5	0.1	
0.26-1.0	2.5	.5	
1.1-3.0	2.1	1.7	
Subtotal 0-3 in	**6.1**		
3.1-9.0	24.9	5.6	4.7
9.1-20.0	19.9	13.6	15.7
>20.0	5.4	22.3	
Subtotal >3 in	**50.2**	**7.4**	**9.8**
TOTAL	**56.3**		

[a] Mean diam.=quadratic mean.



STEREO PAIR: 1-AZ-PPSP-PRE-03 - D



ADDITIONAL FUEL INFORMATION

Sound residue >3 inch diameter:	True Fir	52%	Average residue depth:	0.5 ft
	E. Spruce	18%	Average duff depth:	1.2 in
	Other	24%	Average litter depth:	0.3 in
Rotted residue >3 inch diameter:		6%		

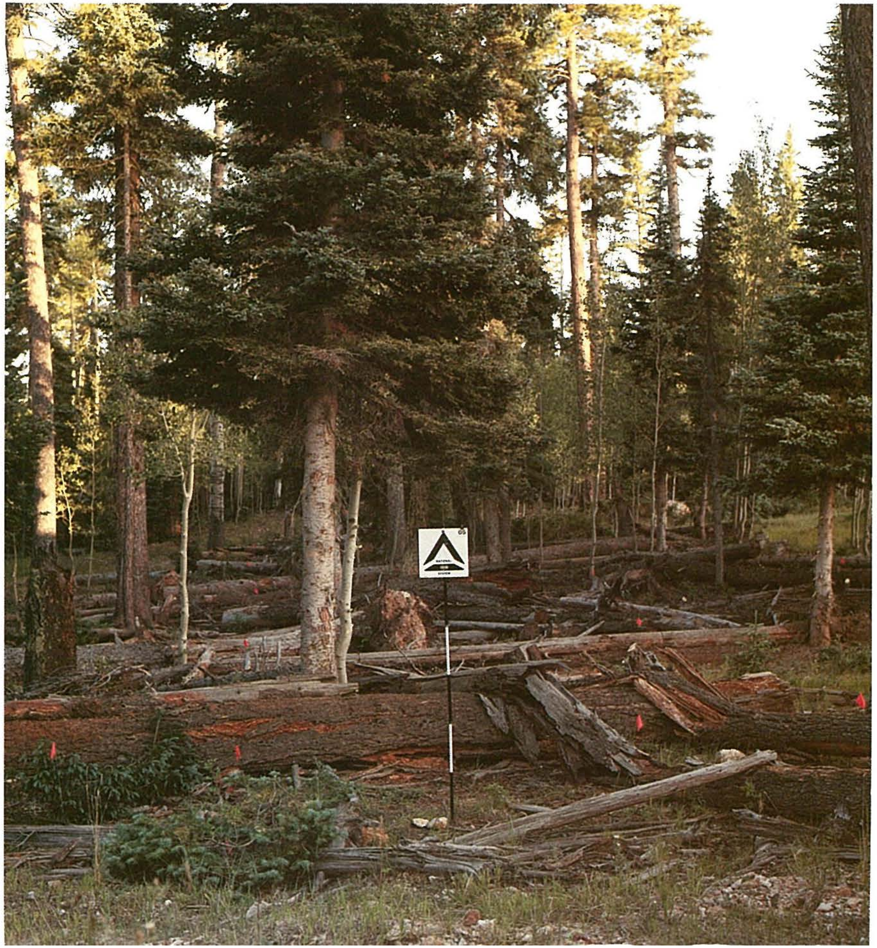
Percent residue >3 inch diameter is based on number of logs.

SERIES 1-AZ-PPSP-PRE-04 - D

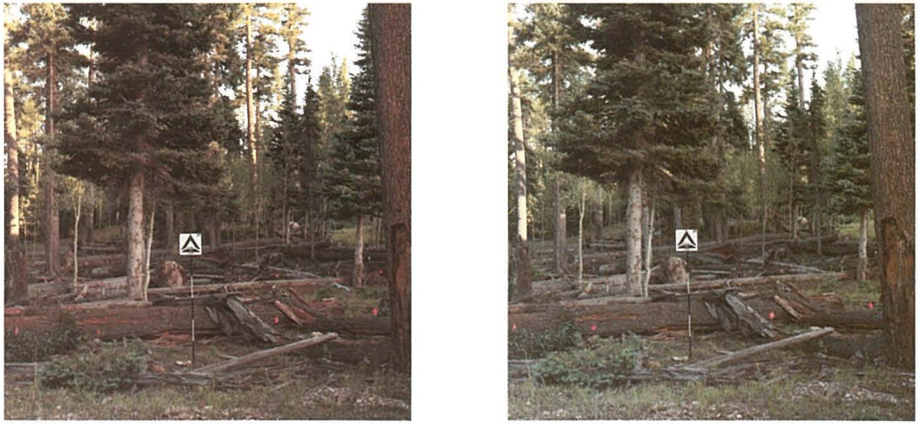
DOWN AND DEAD WOODY FUEL LOADING

Size class (in)	Load (tons/acre)	Mean diam.[a] - - (in) - - sound	rot
0.0-0.25	.6	0.1	
0.26-1.0	1.0	.5	
1.1-3.0	4.0	1.7	
Subtotal 0-3 in	**5.6**		
3.1-9.0	17.0	6.2	5.8
9.1-20.0	55.8	12.7	11.4
>20.0	17.4	22.3	
Subtotal >3 in	**90.2**	**10.9**	**8.3**
TOTAL	**95.8**		

[a] Mean diam.=quadratic mean.



STEREO PAIR: 1-AZ-PPSP-PRE-04 - D



ADDITIONAL FUEL INFORMATION

Sound residue >3 inch diameter:	Doug.-fir	29%	Average residue depth:	0.6 ft
	E. Spruce	14%	Average duff depth:	1.5 in
	Other	19%	Average litter depth:	0.2 in
Rotted residue >3 inch diameter:		38%		

Percent residue >3 inch diameter is based on number of logs.

From PNW-105, 1980

Mixed Conifer

Digitized by Google

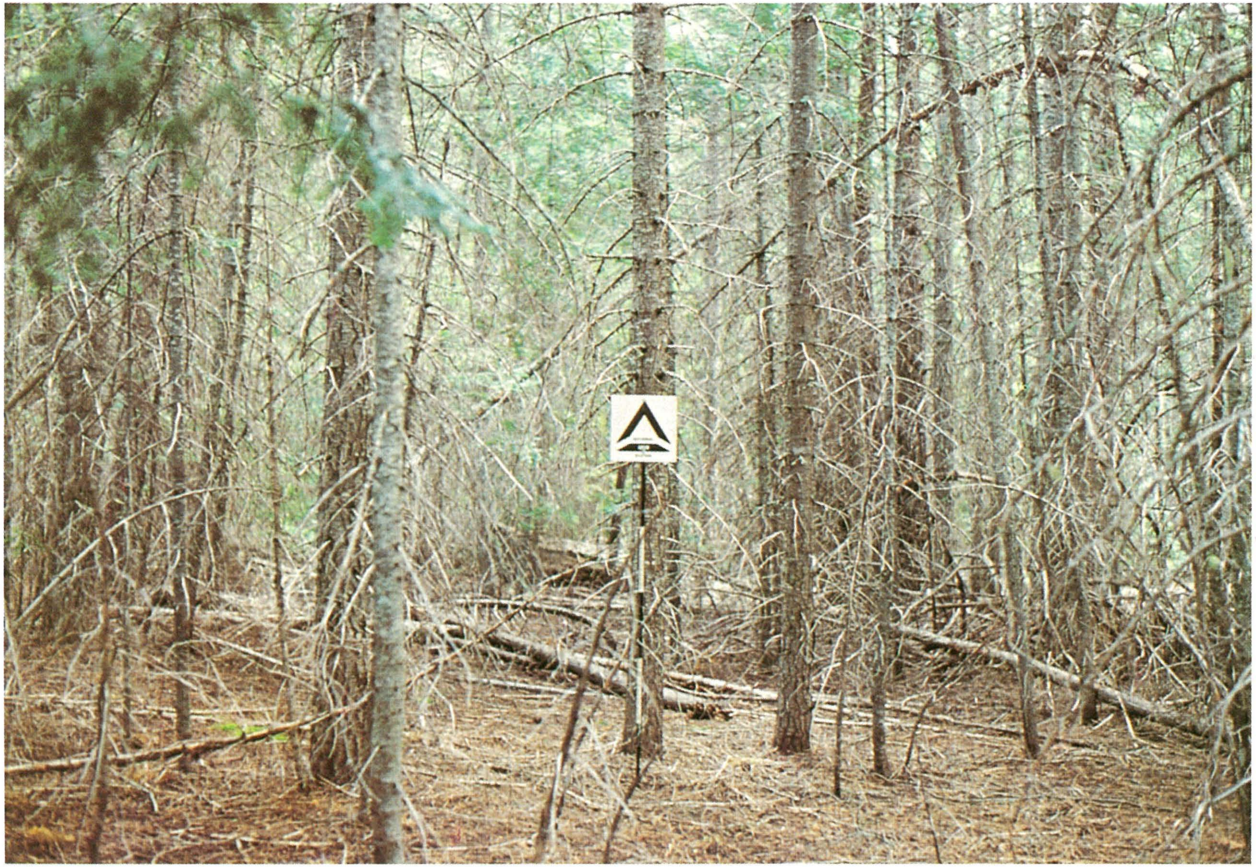
MIXED CONIFER

SIZE CLASS 2

A SERIES OF 3 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



1-MC-2 - B

DATA SHEET

Residue descriptive code 1-MC-2 -B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.6	41
0.26- 1.0	2.3	154
1.1 - 3.0	1.9	149
3.1 - 9.0	2.0	162
9.1 -20.0	0	0
20.1+	0	0
Total	6.8	506

OTHER MEASUREMENTS

Average residue depth (feet) 0.3

Ground area covered by residue (percent) 99

Average duff and litter depth (inches) 2.0

Ground area covered by duff and litter (percent) 97

Sound residue 3.1-inch diameter and larger (percent) 100

Rotten residue 3.1-inch diameter and larger (percent) 0

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 9

Average d.b.h. (inches) 34

Average tree height (feet) 121

Average crown height (feet) 58

Estimated crown space occupied (percent) 10

Trees 8- to 20-inch d.b.h.

Dominant species white fir

Trees per acre 165

Average d.b.h. (inches) 13

Average tree height (feet) 74

Average crown height (feet) 34

Estimated crown space 40

Trees and dead stems under 8-inch d.b.h.

Dominant species white fir

Trees per acre 800

Average d.b.h. (inches) 3

Average tree height (feet) 24

Average crown height (feet) 16

Estimated crown space occupied (percent) 50

Snags 8-inch d.b.h. and over

Number per acre 19

Average d.b.h. 13

Average height 55

BRUSH INFORMATION

Dominant species

Average height (inches)

Average crown height (inches)

Ground space occupied (percent)

GRASS AND FORBS INFORMATION

Dominant species

Average height (inches)

Ground space (percent)

Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

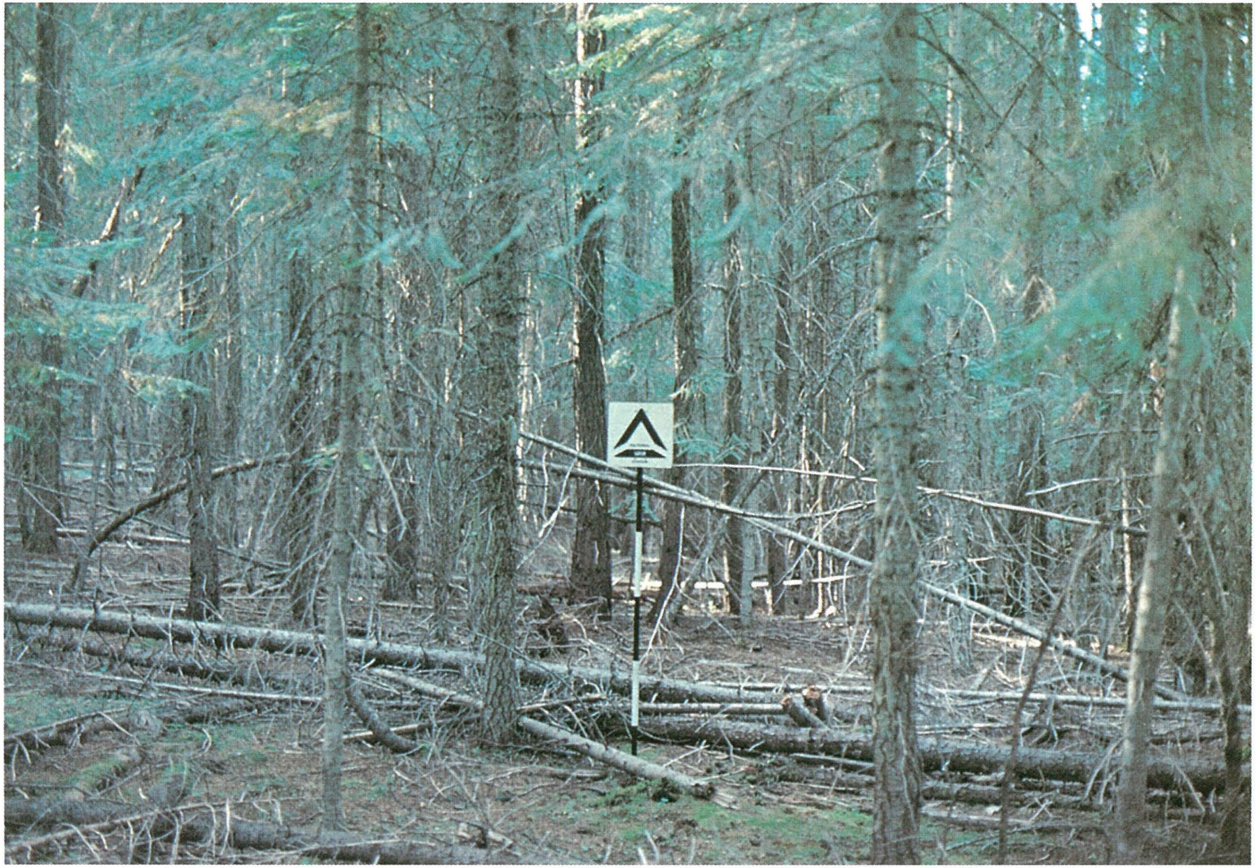
Spread rate (chains/hour) 2

Flame length (feet) 3

Resistance to suppression(chains/man-hour) 1.3

Ecoclass coding CPG-12

REMARKS



2-MC-2 - B

DATA SHEET

Residue descriptive code 2-MC-2-B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.5	33
0.26- 1.0	1.3	85
1.1 - 3.0	3.0	242
3.1 - 9.0	4.5	383
9.1 -20.0	1.5	161
20.1+	0	0
Total	10.8	904

OTHER MEASUREMENTS

Average residue depth	(feet)	0.7
Ground area covered by residue	(percent)	76
Average duff and litter depth	(inches)	2.0
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	80
Rotten residue 3.1-inch diameter and larger	(percent)	20

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species grand fir
Trees per acre 4
Average d.b.h. (inches) 25
Average tree height (feet) 85
Average crown height (feet) 30
Estimated crown space occupied (percent) 10

Trees and dead stems under 8-inch d.b.h.

Dominant species grand fir
Trees per acre 1,650
Average d.b.h. (inches) 2
Average tree height (feet) 18
Average crown height (feet) 15
Estimated crown space occupied (percent) 40

Trees 8- to 20-inch d.b.h.

Dominant species western larch
Trees per acre 347
Average d.b.h. (inches) 10
Average tree height (feet) 72
Average crown height (feet) 49
Estimated crown space 50

Snags 8-inch d.b.h. and over

Number per acre
Average d.b.h.
Average height

BRUSH INFORMATION

Dominant species
Average height (inches)
Average crown height (inches)
Ground space occupied (percent)

GRASS AND FORBS INFORMATION

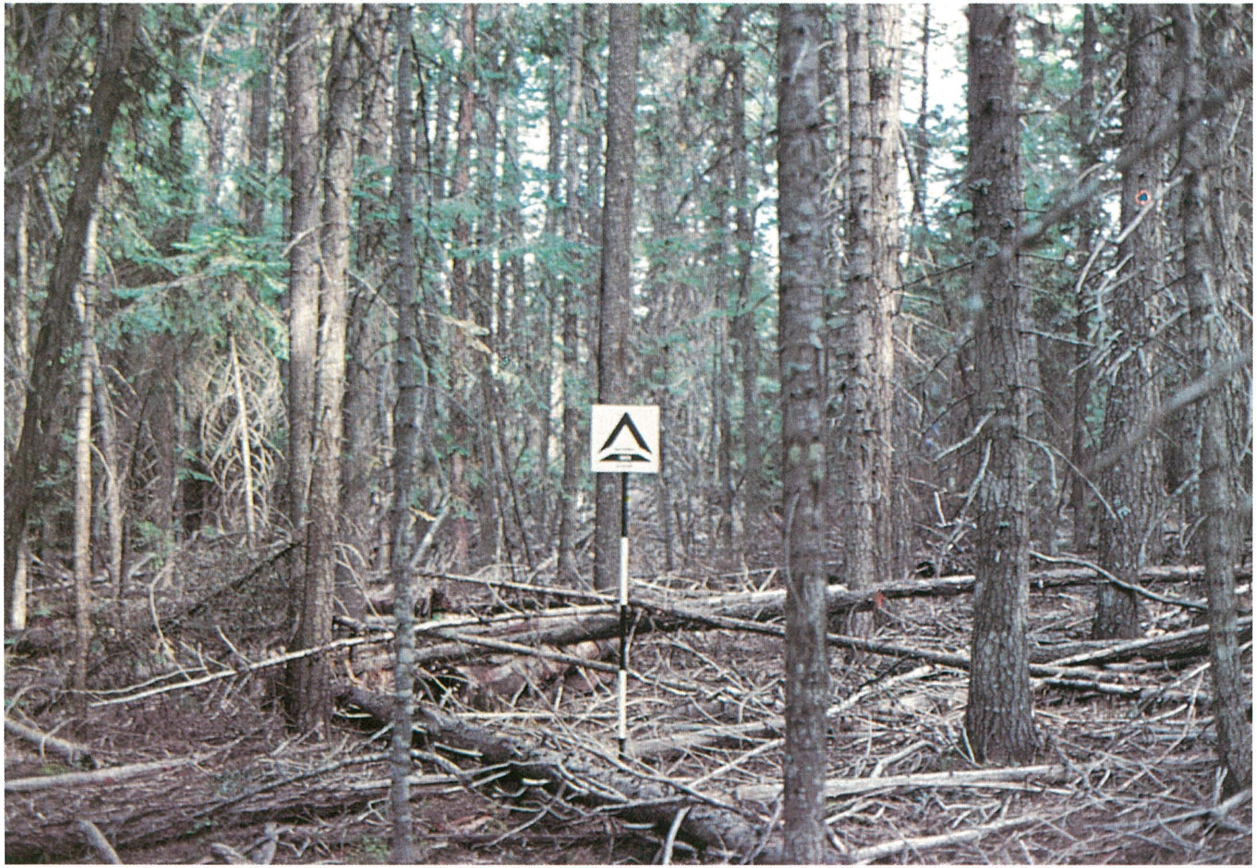
Dominant species
kinnikinnick
Average height (inches) 3
Ground space (percent) 2
Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 2
Flame length (feet) 3
Resistance to suppression(chains/man-hour) 1.3

Ecoclass coding CWS2-11

REMARKS



3-MC-2-B

DATA SHEET

Residue descriptive code 3-MC-2-B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	1.3	86
0.26- 1.0	3.4	224
1.1 - 3.0	4.9	396
3.1 - 9.0	28.6	2,196
9.1 -20.0	10.1	810
20.1+	8.0	689
Total	56.3	4,401

OTHER MEASUREMENTS

Average residue depth	(feet)	0.8
Ground area covered by residue	(percent)	88
Average duff and litter depth	(inches)	1.5
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	93
Rotten residue 3.1-inch diameter and larger	(percent)	7

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species grand fir
Trees per acre 3
Average d.b.h. (inches) 22
Average tree height (feet) 100
Average crown height (feet) 40
Estimated crown space occupied (percent) 10

Trees and dead stems under 8-inch d.b.h.

Dominant species grand fir
Trees per acre 1,300
Average d.b.h. (inches) 2
Average tree height (feet) 14
Average crown height (feet) 10
Estimated crown space occupied (percent) 40

Trees 8- to 20-inch d.b.h.

Dominant species grand fir
Trees per acre 181
Average d.b.h. (inches) 13
Average tree height (feet) 77
Average crown height (feet) 33
Estimated crown space 40

Snags 8-inch d.b.h. and over

Number per acre 65
Average d.b.h. 10
Average height 53

BRUSH INFORMATION

Dominant species
Average height (inches)
Average crown height (inches)
Ground space occupied (percent)

GRASS AND FORBS INFORMATION

Dominant species
ribes
Average height (inches) 5
Ground space (percent) 4
Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 7
Flame length (feet) 7
Resistance to suppression(chains/man-hour) 1.1

Ecoclass coding CWS2-11

REMARKS

MIXED CONIFER

SIZE CLASS 3

A SERIES OF 3 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

1-MC-3

DATA SHEET

Residue descriptive code 1-MC-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.7	39
0.26- 1.0	1.1	61
1.1 - 3.0	1.5	91
3.1 - 9.0	3.1	205
9.1 -20.0	4.7	319
20.1+	0	0
Total	11.1	715

OTHER MEASUREMENTS

Average residue depth (feet) 0.2
Ground area covered by residue (percent) 55
Average duff and litter depth (inches) 1.0
Ground area covered by duff and litter (percent) 100
Sound residue 3.1-inch diameter and larger (percent) 100
Rotten residue 3.1-inch diameter and larger (percent) 0

STAND INFORMATION

Trees over 20-inch d.b.h.
Dominant species Douglas-fir
Trees per acre 5
Average d.b.h. (inches) 27
Average tree height (feet) 103
Average crown height (feet) 28
Estimated crown space occupied (percent) 5

Trees and dead stems under 8-inch d.b.h.
Dominant species Douglas-fir
Trees per acre 50
Average d.b.h. (inches) 1
Average tree height (feet) 7
Average crown height (feet) 3
Estimated crown space occupied (percent) 10

Trees 8- to 20-inch d.b.h.
Dominant species Douglas-fir
Trees per acre 135
Average d.b.h. (inches) 15
Average tree height (feet) 75
Average crown height (feet) 28
Estimated crown space 40

Snags 8-inch d.b.h. and over
Number per acre 9
Average d.b.h. 15
Average height 29

BRUSH INFORMATION

Dominant species big huckleberry
Average height (inches) 8
Average crown height (inches) 4
Ground space occupied (percent) 5

GRASS AND FORBS INFORMATION

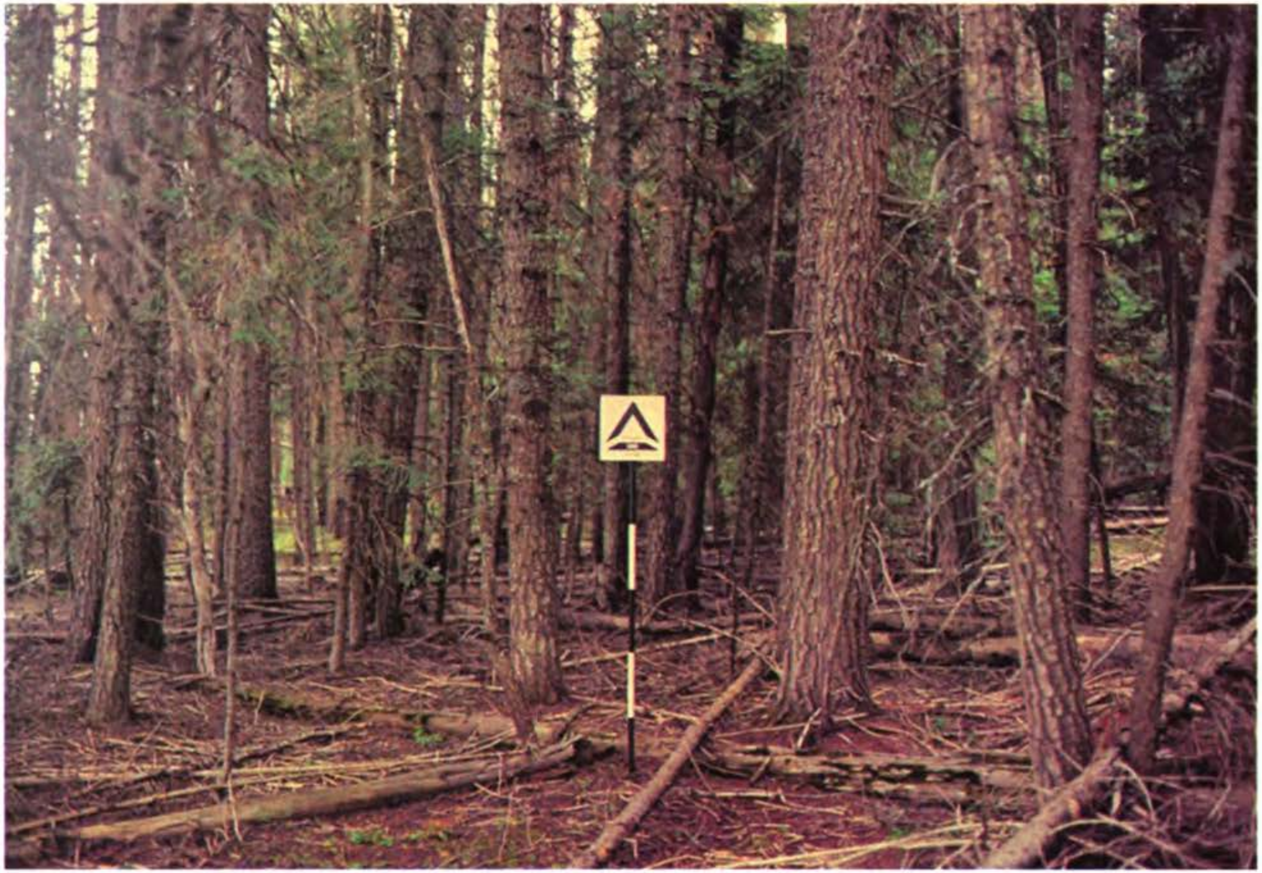
Dominant species elk sedge
Average height (inches) 2
Ground space (percent) 10
Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 1
Flame length (feet) 2
Resistance to suppression(chains/man-hour) 2

Ecoclass coding CWS2-11

REMARKS



2-MC-3

DATA SHEET

Residue descriptive code 2-MC-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.5	36
0.26- 1.0	1.8	122
1.1 - 3.0	3.5	277
3.1 - 9.0	12.3	958
9.1 -20.0	2.3	171
20.1+	0	0
Total	20.4	1,564

OTHER MEASUREMENTS

Average residue depth (feet) 0.2

Ground area covered by residue (percent) 73

Average duff and litter depth (inches) 1.9

Ground area covered by duff and litter (percent) 99

Sound residue 3.1-inch diameter and larger (percent) 93

Rotten residue 3.1-inch diameter and larger (percent) 7

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species grand fir

Trees per acre 3

Average d.b.h. (inches) 27

Average tree height (feet) 100

Average crown height (feet) 50

Estimated crown space occupied (percent) 1

Trees and dead stems under 8-inch d.b.h.

Dominant species grand fir

Trees per acre 1,400

Average d.b.h. (inches) 3

Average tree height (feet) 21

Average crown height (feet) 10

Estimated crown space occupied (percent) 30

Trees 8- to 20-inch d.b.h.

Dominant species grand fir

Trees per acre 263

Average d.b.h. (inches) 11

Average tree height (feet) 84

Average crown height (feet) 53

Estimated crown space 60

Snags 8-inch d.b.h. and over

Number per acre 107

Average d.b.h. 9

Average height 56

BRUSH INFORMATION

Dominant species big huckleberry

Average height (inches) 7

Average crown height (inches) 3

Ground space occupied (percent) <1

GRASS AND FORBS INFORMATION

Dominant species kinnikinnick

Average height (inches) 2

Ground space (percent) 13

Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

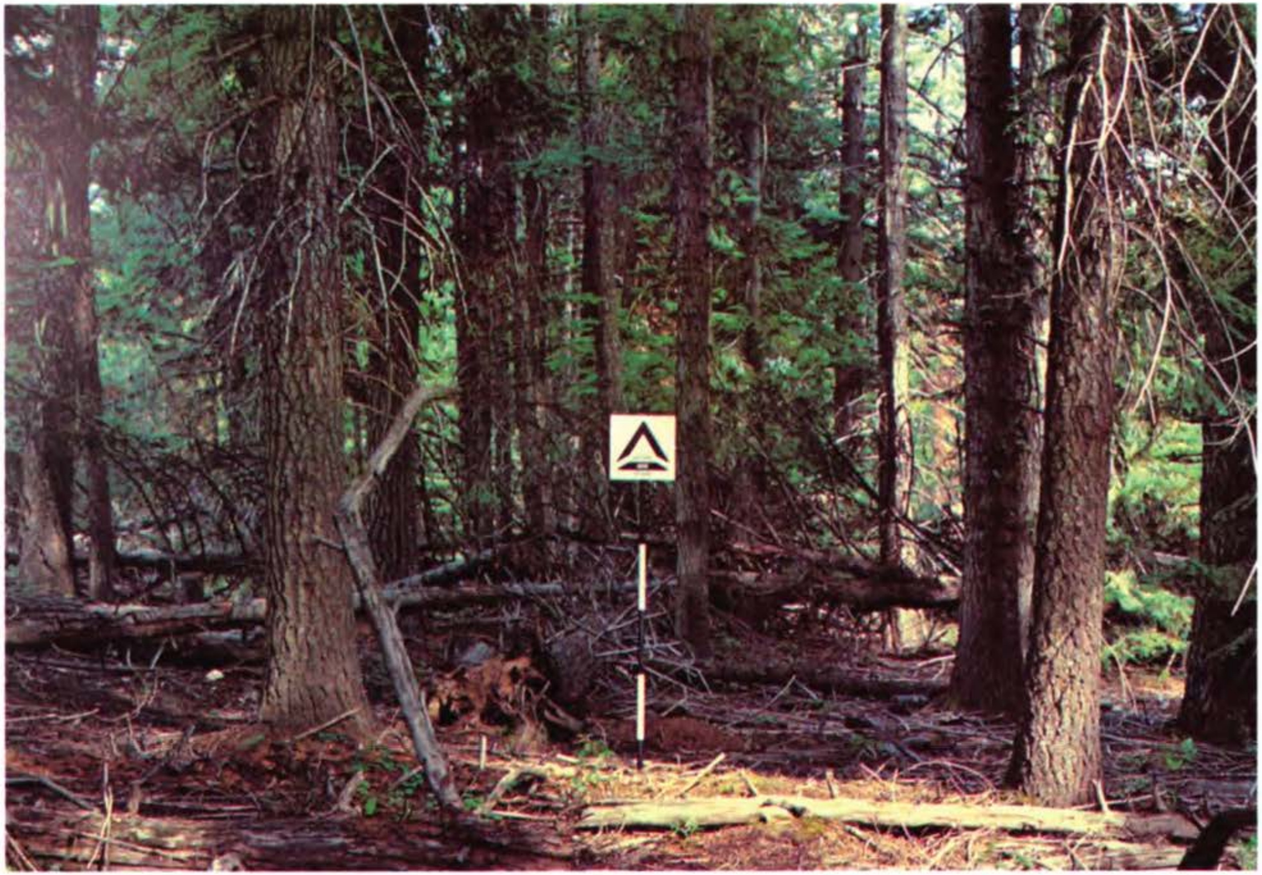
Spread rate (chains/hour) 3

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 1.5

Ecoclass coding CWS2-11

REMARKS



3-MC-3

DATA SHEET

Residue descriptive code 3-MC-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.8	51
0.26- 1.0	2.7	180
1.1 - 3.0	2.6	209
3.1 - 9.0	10.6	848
9.1 -20.0	26.8	2,257
20.1+	0	0
Total	43.5	3,545

OTHER MEASUREMENTS

Average residue depth (feet) 1.2

Ground area covered by residue (percent) 75

Average duff and litter depth (inches) 1.1

Ground area covered by duff and litter (percent) 91

Sound residue 3.1-inch diameter and larger (percent) 88

Rotten residue 3.1-inch diameter and larger (percent) 12

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species grand fir

Trees per acre 17

Average d.b.h. (inches) 22

Average tree height (feet) 58

Average crown height (feet) 11

Estimated crown space occupied (percent) 10

Trees 8- to 20-inch d.b.h.

Dominant species Douglas-fir

Trees per acre 156

Average d.b.h. (inches) 15

Average tree height (feet) 75

Average crown height (feet) 27

Estimated crown space 50

Trees and dead stems under 8-inch d.b.h.

Dominant species Douglas-fir

Trees per acre 150

Average d.b.h. (inches) 2

Average tree height (feet) 9

Average crown height (feet) 1

Estimated crown space occupied (percent) 10

Snags 8-inch d.b.h. and over

Number per acre 21

Average d.b.h. 23

Average height 60

BRUSH INFORMATION

Dominant species wildrose

Average height (inches) 17

Average crown height (inches) 14

Ground space occupied (percent) 2

GRASS AND FORBS INFORMATION

Dominant species elk sedge

Average height (inches) 4

Ground space (percent) 11

Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 3

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 1.1

Ecoclass coding CWF3-11

REMARKS

From PNW-105, 1980

Ponderosa Pine

Digitized by Google

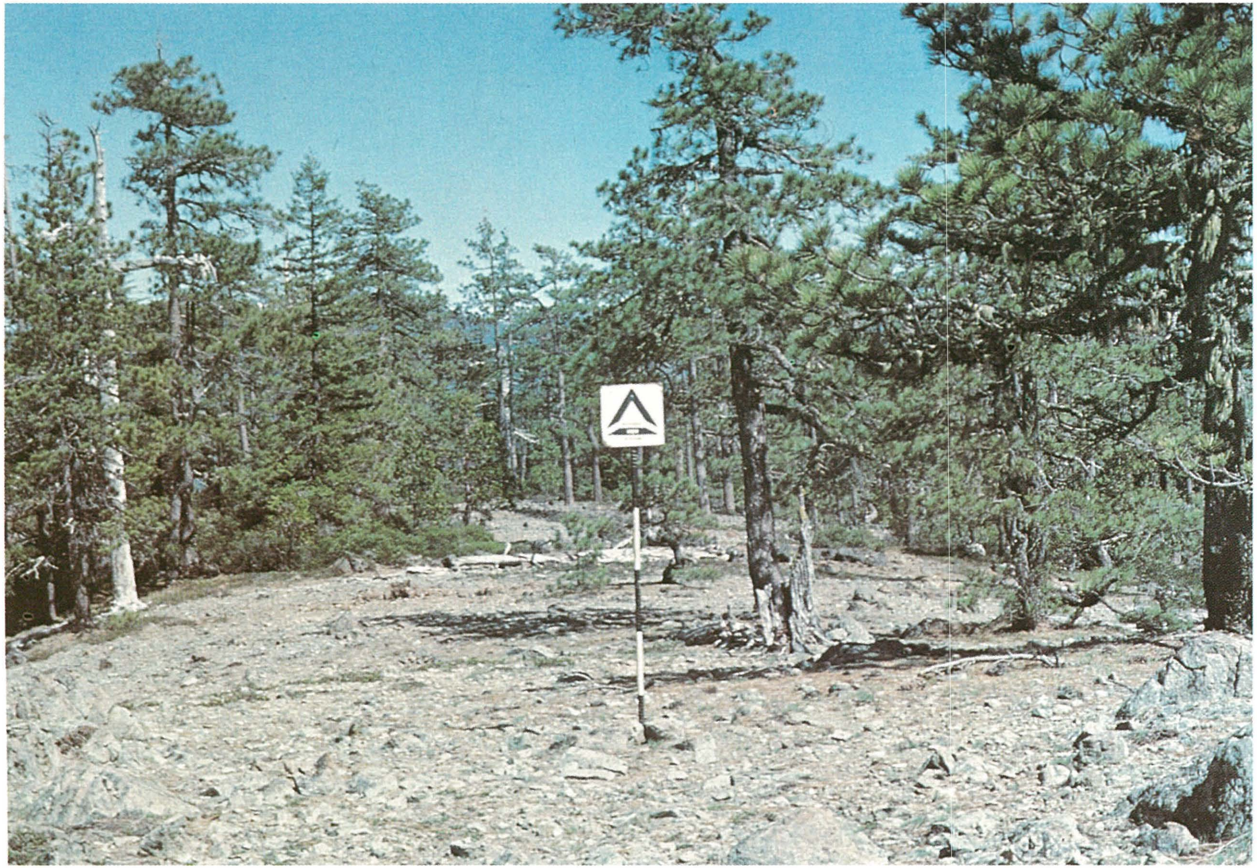
PONDEROSA PINE & ASSOCIATED SPECIES

SIZE CLASS 3

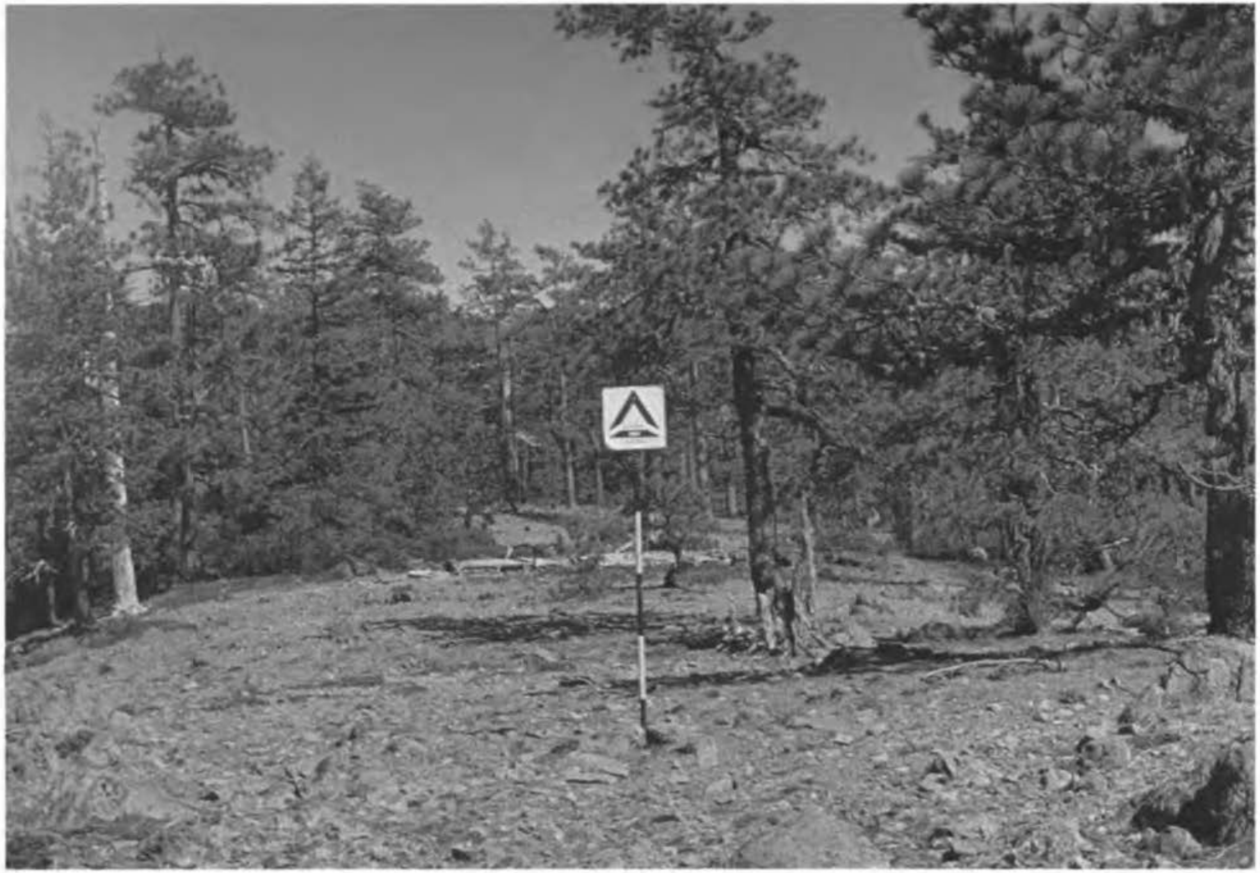
A SERIES OF 5 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



1-PP & Assoc-3-B



1-PP & Assoc-3

DATA SHEET

Residue descriptive code 1-PP & Assoc-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.02	1
0.26- 1.0	.3	18
1.1 - 3.0	.1	5
3.1 - 9.0	1.0	77
9.1 -20.0	0	0
20.1+	0	0
Total	1.42	101

OTHER MEASUREMENTS

Average residue depth	(feet)	0.01
Ground area covered by residue	(percent)	5
Average duff and litter depth	(inches)	.3
Ground area covered by duff and litter	(percent)	36
Sound residue 3.1-inch diameter and larger	(percent)	100
Rotten residue 3.1-inch diameter and larger	(percent)	0

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 1

Average d.b.h. (inches) 22

Average tree height (feet) 60

Average crown height (feet) 25

Estimated crown space occupied (percent) 1

Trees and dead stems under 8-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 18

Average d.b.h. (inches) 16

Average tree height (feet) 36

Average crown height (feet) 8

Estimated crown space 20

Snags 8-inch d.b.h. and over

Number per acre 3

Average d.b.h. 18

Average height 50

BRUSH INFORMATION

Dominant species

Average height (inches)

Average crown height (inches)

Ground space occupied (percent)

GRASS AND FORBS INFORMATION

Dominant species

fescue

Average height (inches) 2

Ground space (percent) 8

Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

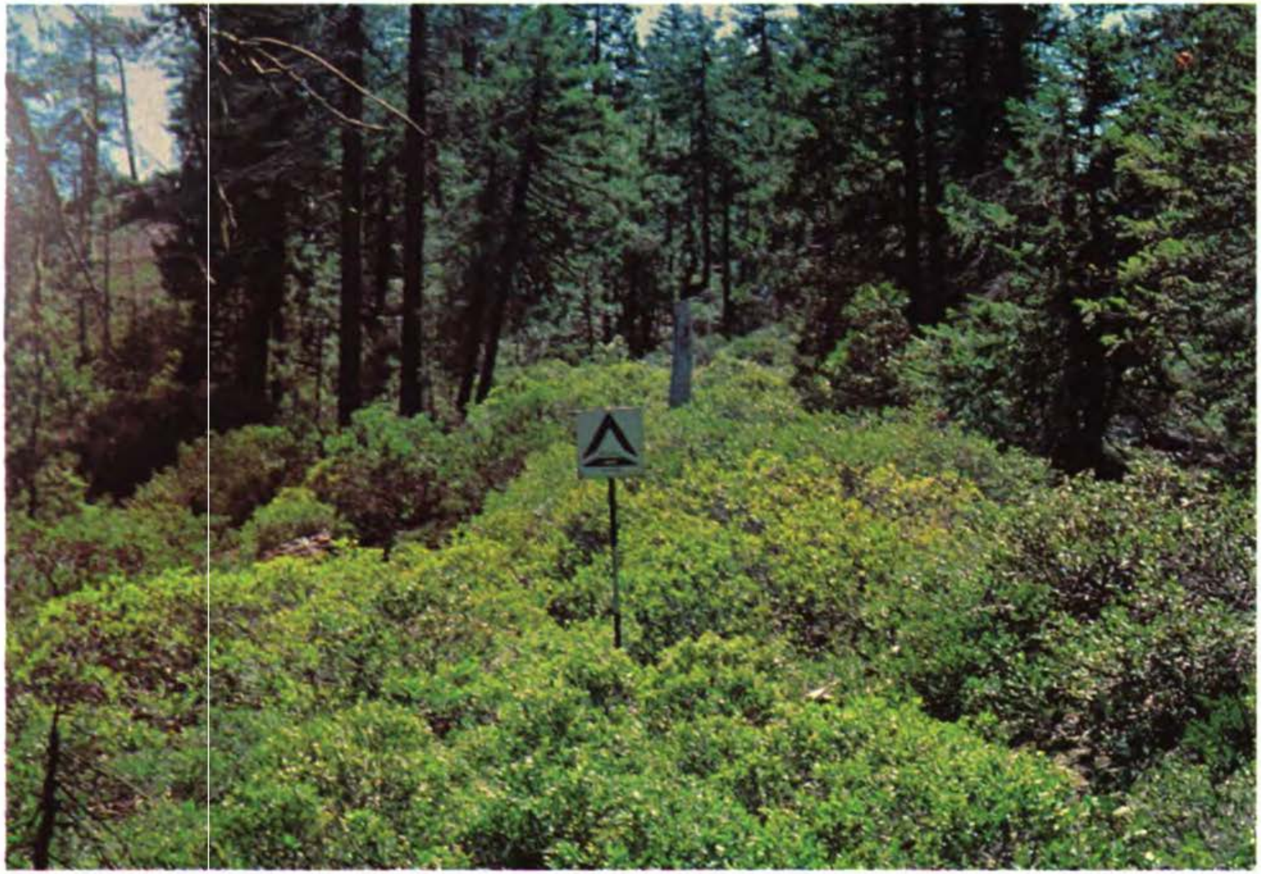
Spread rate (chains/hour) 0

Flame length (feet) 0

Resistance to suppression(chains/man-hour) 12

Ecoclass coding CPC1

REMARKS



2-PP & Assoc-3

DATA SHEET

Residue descriptive code 2-PP & Assoc-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.3	22
0.26- 1.0	.9	61
1.1 - 3.0	.2	14
3.1 - 9.0	.3	33
9.1 -20.0	0	0
20.1+	0	0
Total	1.7	130

OTHER MEASUREMENTS

Average residue depth (feet) 0.1
Ground area covered by residue (percent) 63
Average duff and litter depth (inches) .9
Ground area covered by duff and litter (percent) 92
Sound residue 3.1-inch diameter and larger (percent) 22
Rotten residue 3.1-inch diameter and larger (percent) 78

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine
Trees per acre 12
Average d.b.h. (inches) 26
Average tree height (feet) 74
Average crown height (feet) 18
Estimated crown space occupied (percent) 10

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine
Trees per acre 300
Average d.b.h. (inches) 4
Average tree height (feet) 12
Average crown height (feet) 6
Estimated crown space occupied (percent) 20

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine
Trees per acre 48
Average d.b.h. (inches) 11
Average tree height (feet) 36
Average crown height (feet) 10
Estimated crown space 20

Snags 8-inch d.b.h. and over

Number per acre 31
Average d.b.h. 13
Average height 40

BRUSH INFORMATION

Dominant species canyon live oak
Average height (inches) 19
Average crown height (inches) 9
Ground space occupied (percent) 61

GRASS AND FORBS INFORMATION

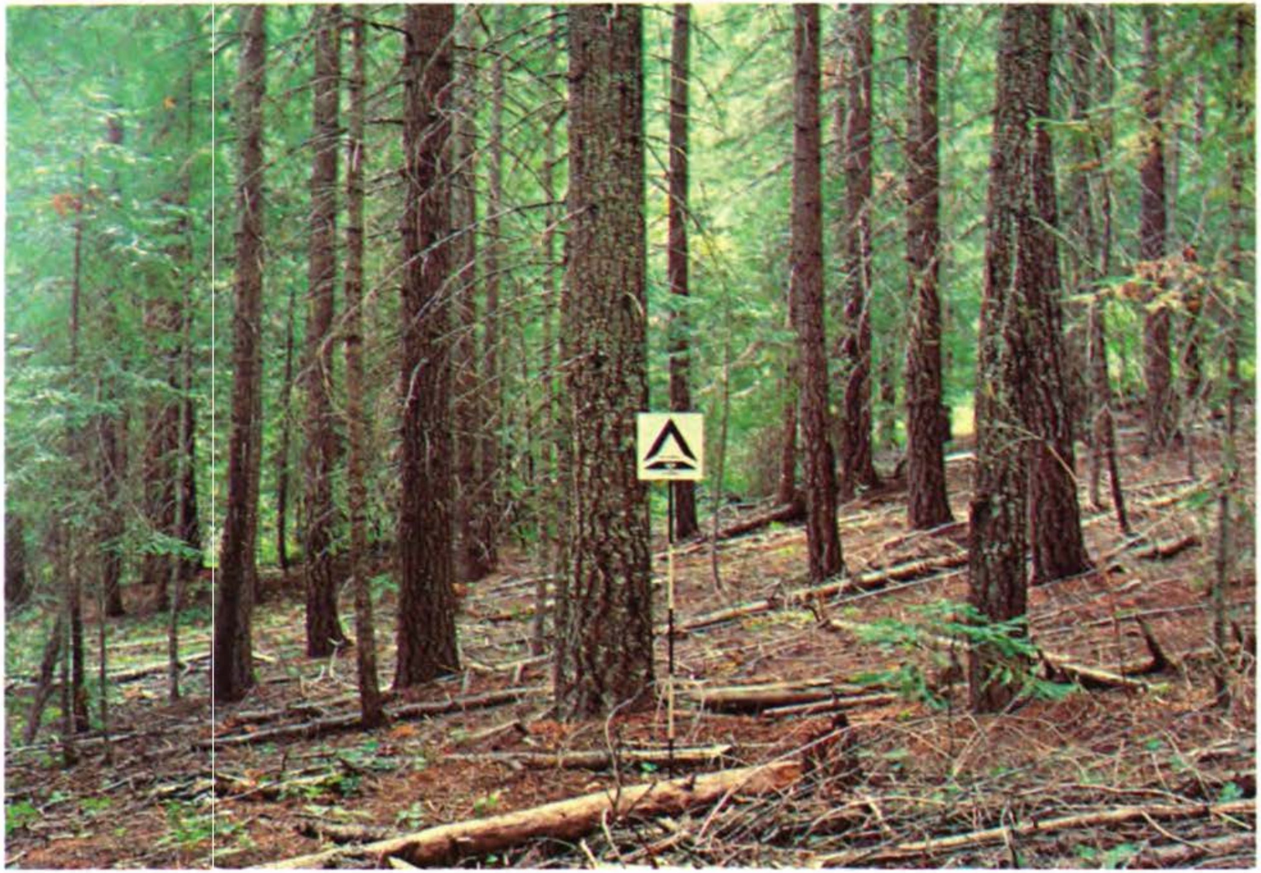
Dominant species common beargrass
Average height (inches) 7
Ground space (percent) 5
Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 13
Flame length (feet) 7
Resistance to suppression (chains/man-hour) 1.7

Ecoclass coding CPH9

REMARKS



3-PP & Assoc-3

DATA SHEET

Residue descriptive code 3-PP & Assoc-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	1.2	83
0.26- 1.0	2.3	154
1.1 - 3.0	1.3	104
3.1 - 9.0	2.8	237
9.1 -20.0	.8	62
20.1+	3.5	370
Total	11.9	1,010

OTHER MEASUREMENTS

Average residue depth	(feet)	0.3
Ground area covered by residue	(percent)	93
Average duff and litter depth	(inches)	2.9
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	65
Rotten residue 3.1-inch diameter and larger	(percent)	35

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species Douglas-fir

Trees per acre 9

Average d.b.h. (inches) 27

Average tree height (feet) 126

Average crown height (feet) 45

Estimated crown space occupied (percent) 10

Trees and dead stems under 8-inch d.b.h.

Dominant species white fir

Trees per acre 1,100

Average d.b.h. (inches) 2

Average tree height (feet) 13

Average crown height (feet) 8

Estimated crown space occupied (percent) 40

Trees 8- to 20-inch d.b.h.

Dominant species Douglas-fir

Trees per acre 242

Average d.b.h. (inches) 15

Average tree height (feet) 96

Average crown height (feet) 55

Estimated crown space 40

Snags 8-inch d.b.h. and over

Number per acre 3

Average d.b.h. 38

Average height 170

BRUSH INFORMATION

Dominant species chinkapin

Average height (inches) 12

Average crown height (inches) 6

Ground space occupied (percent) <1

GRASS AND FORBS INFORMATION

Dominant species rubus

Average height (inches) 5

Ground space (percent) 3

Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 2

Flame length (feet) 3

Resistance to suppression(chains/man-hour) 1.7

Ecoclass coding CWH1-11

REMARKS

4-PP & Assoc-3

DATA SHEET

Residue descriptive code 4-PP & Assoc-3-B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	1.4	95
0.26- 1.0	2.6	172
1.1 - 3.0	1.8	147
3.1 - 9.0	7.1	590
9.1 -20.0	0	0
20.1+	0	0
Total	12.9	1,004

OTHER MEASUREMENTS

Average residue depth	(feet)	0.3
Ground area covered by residue	(percent)	97
Average duff and litter depth	(inches)	3.3
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	98
Rotten residue 3.1-inch diameter and larger	(percent)	2

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species white fir

Trees per acre 25

Average d.b.h. (inches) 22

Average tree height (feet) 118

Average crown height (feet) 55

Estimated crown space occupied (percent) 20

Trees and dead stems under 8-inch d.b.h.

Dominant species white fir

Trees per acre 350

Average d.b.h. (inches) 4

Average tree height (feet) 28

Average crown height (feet) 23

Estimated crown space occupied (percent) 30

Trees 8- to 20-inch d.b.h.

Dominant species white fir

Trees per acre 263

Average d.b.h. (inches) 15

Average tree height (feet) 93

Average crown height (feet) 51

Estimated crown space 40

Snags 8-inch d.b.h. and over

Number per acre 19

Average d.b.h. 8

Average height 30

BRUSH INFORMATION

Dominant species ______

Average height (inches) ______

Average crown height (inches) ______

Ground space occupied (percent) ______

GRASS AND FORBS INFORMATION

Dominant species ______

Average height (inches) ______

Ground space (percent) ______

Estimated weight (pounds per acre) ______

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 3

Flame length (feet) 4

Resistance to suppression (chains/man-hour) 1.1

Ecoclass coding CDS6-13

REMARKS

114A

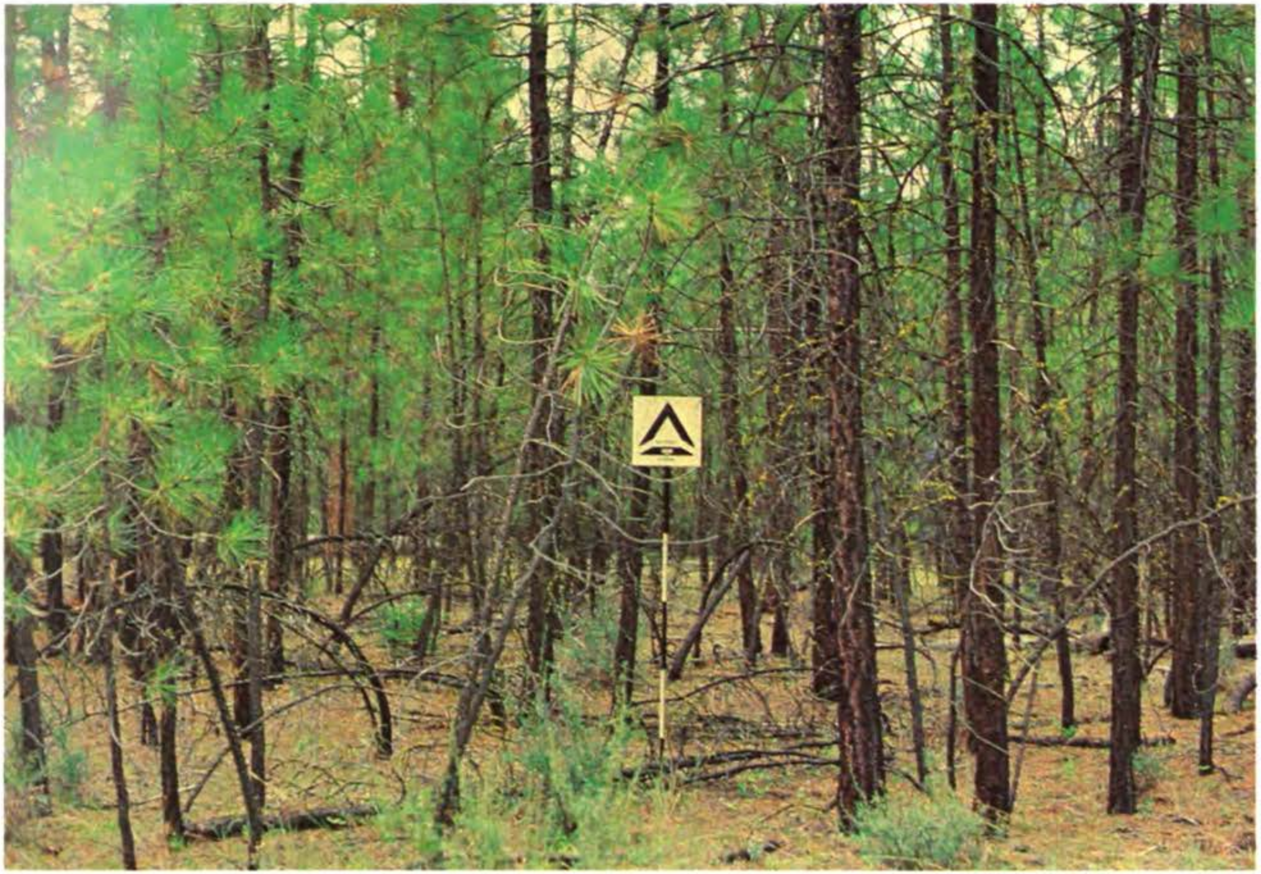
PONDEROSA PINE

SIZE CLASS 1

A SERIES OF 3 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



1-PP-1

DATA SHEET

Residue descriptive code 1-PP-1

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	4
0.26- 1.0	1.5	91
1.1 - 3.0	2.2	143
3.1 - 9.0	1.1	89
9.1 -20.0	1.8	147
20.1+	3.3	263
Total	10.0	737

OTHER MEASUREMENTS

Average residue depth	(feet)	0.2
Ground area covered by residue	(percent)	59
Average duff and litter depth	(inches)	1.0
Ground area covered by duff and litter	(percent)	95
Sound residue 3.1-inch diameter and larger	(percent)	100
Rotten residue 3.1-inch diameter and larger	(percent)	0

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ______

Trees per acre ______

Average d.b.h. (inches) ______

Average tree height (feet) ______

Average crown height (feet) ______

Estimated crown space occupied (percent) ______

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 1,785

Average d.b.h. (inches) 5

Average tree height (feet) 22

Average crown height (feet) 13

Estimated crown space occupied (percent) 50

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 14

Average d.b.h. (inches) 10

Average tree height (feet) 59

Average crown height (feet) 24

Estimated crown space 5

Snags 8-inch d.b.h. and over

Number per acre ______

Average d.b.h. ______

Average height ______

BRUSH INFORMATION

Dominant species bitterbrush

Average height (inches) 16

Average crown height (inches) 1

Ground space occupied (percent) 1

GRASS AND FORBS INFORMATION

Dominant species strawberry

Average height (inches) 2

Ground space (percent) 1

Estimated weight (pounds per acre) 15

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

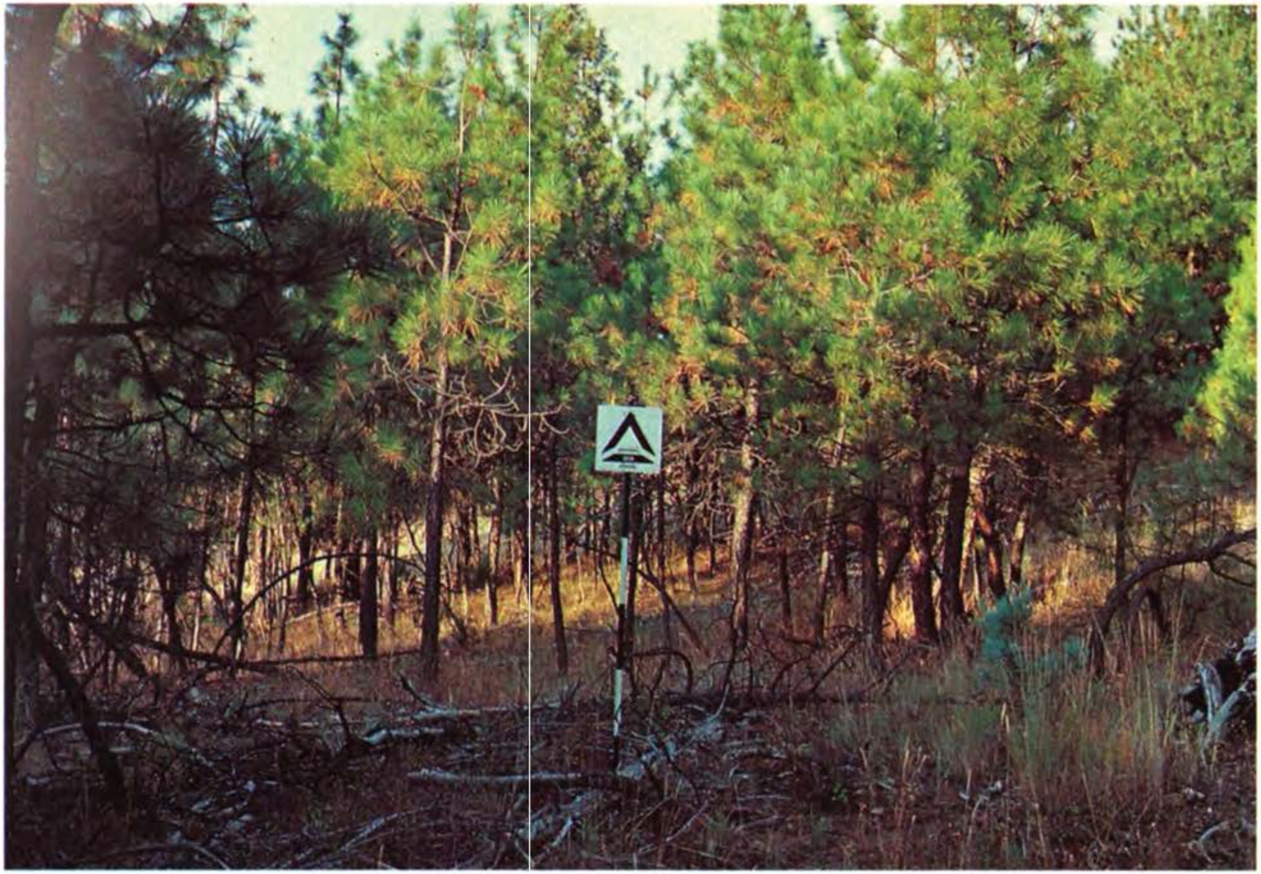
Spread rate (chains/hour) 3

Flame length (feet) 3

Resistance to suppression(chains/man-hour) 2.4

Ecoclass coding CPS2-12

REMARKS



2-PP-1

DATA SHEET

Residue descriptive code 2-PP-1

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.1	5
0.26- 1.0	1.5	89
1.1 - 3.0	4.8	311
3.1 - 9.0	5.5	497
9.1 -20.0	2.3	249
20.1+	0	0
Total	14.2	1,151

OTHER MEASUREMENTS

Average residue depth	(feet)	0.2
Ground area covered by residue	(percent)	55
Average duff and litter depth	(inches)	.8
Ground area covered by duff and litter	(percent)	61
Sound residue 3.1-inch diameter and larger	(percent)	69
Rotten residue 3.1-inch diameter and larger	(percent)	31

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 19

Average d.b.h. (inches) 8

Average tree height (feet) 40

Average crown height (feet) 15

Estimated crown space 5

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 950

Average d.b.h. (inches) 3

Average tree height (feet) 18

Average crown height (feet) 9

Estimated crown space occupied (percent) 30

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species snowberry

Average height (inches) 8

Average crown height (inches) 3

Ground space occupied (percent) 7

GRASS AND FORBS INFORMATION

Dominant species pinegrass

Average height (inches) 9

Ground space (percent) 6

Estimated weight (pounds per acre) 250

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

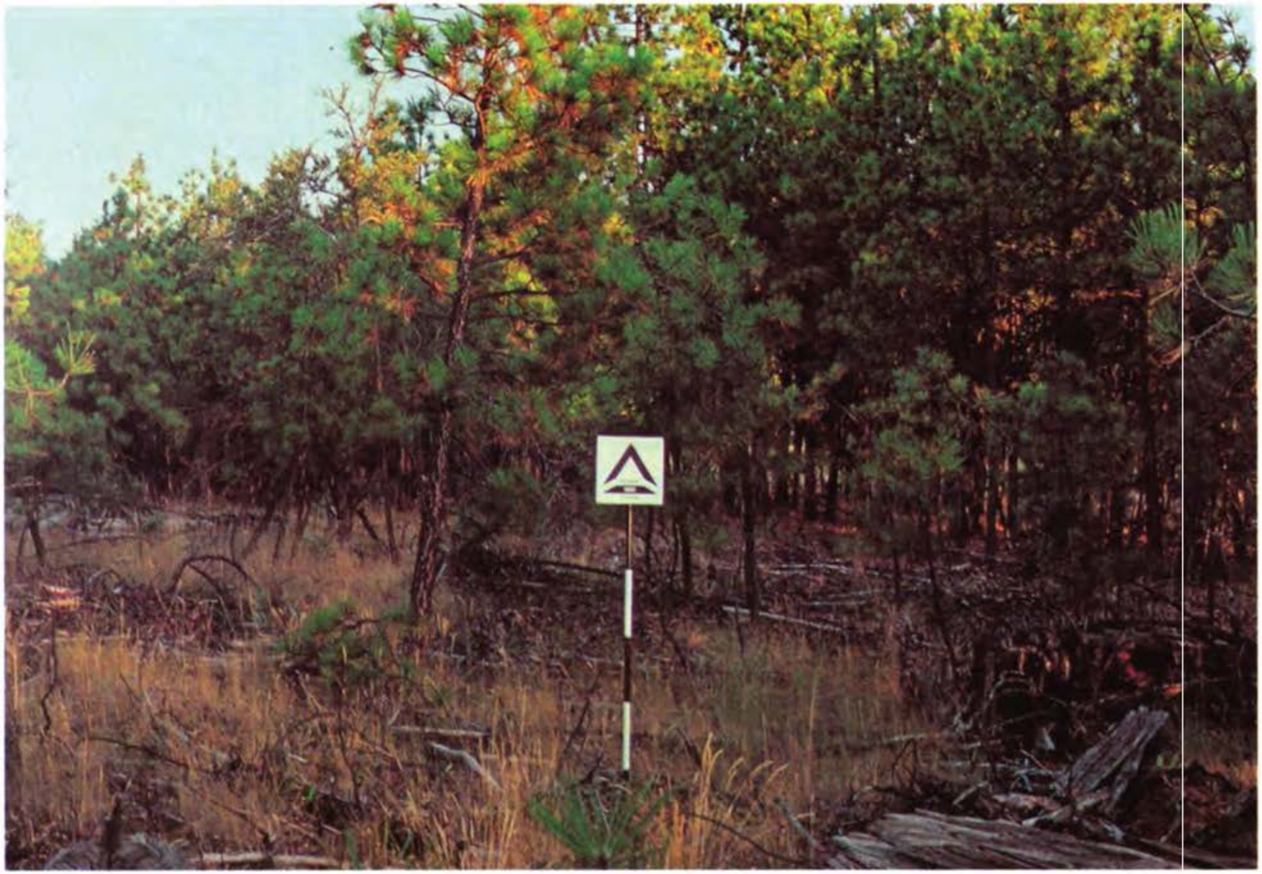
Spread rate (chains/hour) 4

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 1.7

Ecoclass coding CDS6-11

REMARKS



3-PP-1

DATA SHEET

Residue descriptive code 3-PP-1

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	9
0.26- 1.0	3.9	238
1.1 - 3.0	4.5	297
3.1 - 9.0	9.5	884
9.1 -20.0	11.7	1,252
20.1+	12.8	1,372
Total	42.5	4,052

OTHER MEASUREMENTS

Average residue depth (feet) 0.3

Ground area covered by residue (percent) 68

Average duff and litter depth (inches) .7

Ground area covered by duff and litter (percent) 73

Sound residue 3.1-inch diameter and larger (percent) 32

Rotten residue 3.1-inch diameter and larger (percent) 68

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 1,300

Average d.b.h. (inches) 3

Average tree height (feet) 23

Average crown height (feet) 14

Estimated crown space occupied (percent) 50

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 38

Average d.b.h. (inches) 9

Average tree height (feet) 52

Average crown height (feet) 26

Estimated crown space 10

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species

snowberry

Average height (inches) 8

Average crown height (inches) 5

Ground space occupied (percent) 11

GRASS AND FORBS INFORMATION

Dominant species

pinegrass

Average height (inches) 9

Ground space (percent) 25

Estimated weight (pounds per acre) 500

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 7

Flame length (feet) 6

Resistance to suppression (chains/man-hour) 1.2

Ecoclass coding CDS6-11

REMARKS

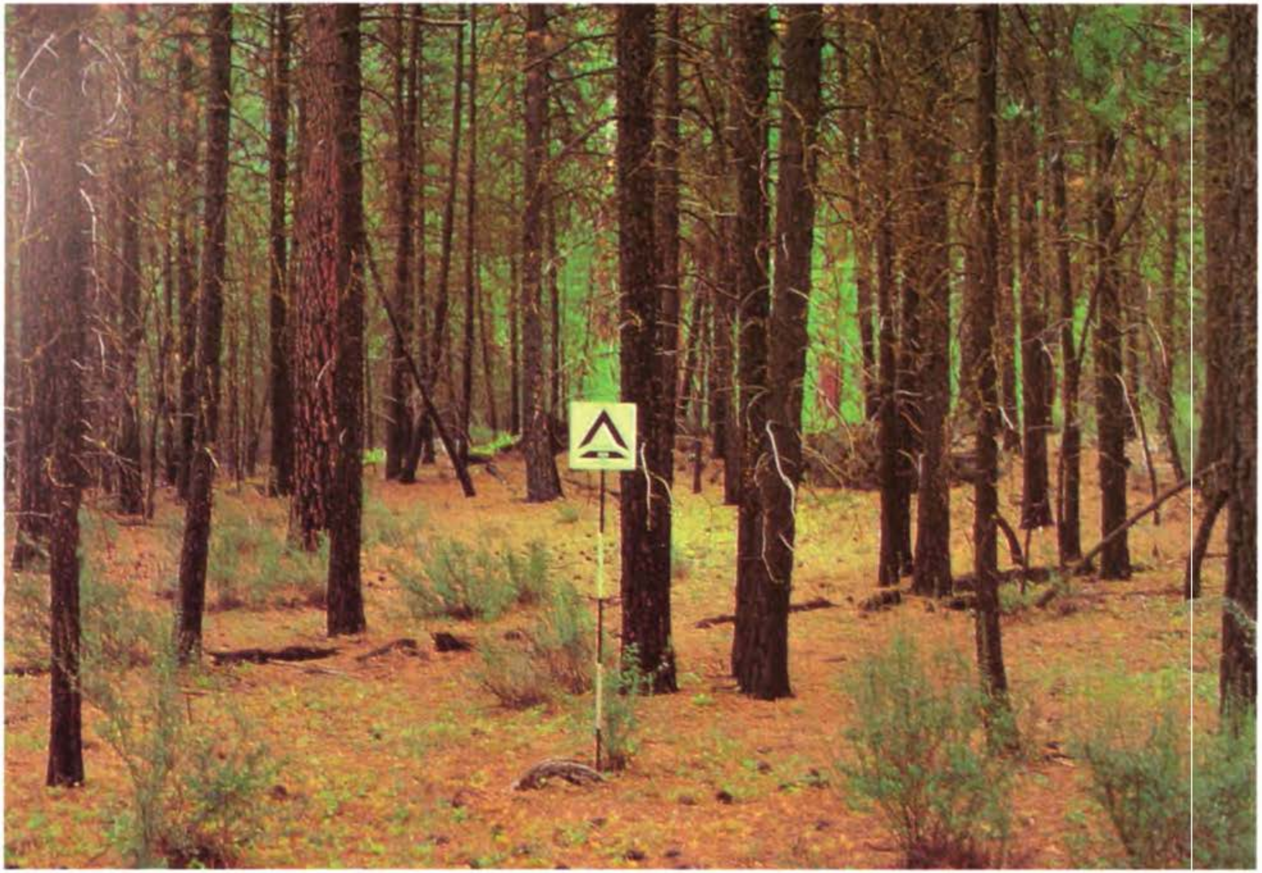
PONDEROSA PINE

SIZE CLASS 2

A SERIES OF 4 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



1-PP-2

DATA SHEET

Residue descriptive code 1-PP-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	4
0.26- 1.0	1.5	25
1.1 - 3.0	1.2	75
3.1 - 9.0	.8	64
9.1 -20.0	1.7	136
20.1+	0	0
Total	5.3	304

OTHER MEASUREMENTS

Average residue depth	(feet)	0.1
Ground area covered by residue	(percent)	64
Average duff and litter depth	(inches)	1.5
Ground area covered by duff and litter	(percent)	97
Sound residue 3.1-inch diameter and larger	(percent)	84
Rotten residue 3.1-inch diameter and larger	(percent)	16

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 10

Average d.b.h. (inches) 28

Average tree height (feet) 118

Average crown height (feet) 50

Estimated crown space occupied (percent) 10

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 155

Average d.b.h. (inches) 13

Average tree height (feet) 66

Average crown height (feet) 34

Estimated crown space 50

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 200

Average d.b.h. (inches) 4

Average tree height (feet) 27

Average crown height (feet) 14

Estimated crown space occupied (percent) 10

Snags 8-inch d.b.h. and over

Number per acre 9

Average d.b.h. 15

Average height 30

BRUSH INFORMATION

Dominant species bitterbrush

Average height (inches) 24

Average crown height (inches) 2

Ground space occupied (percent) 5

GRASS AND FORBS INFORMATION

Dominant species strawberry

Average height (inches) 1

Ground space (percent) 5

Estimated weight (pounds per acre) 20

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

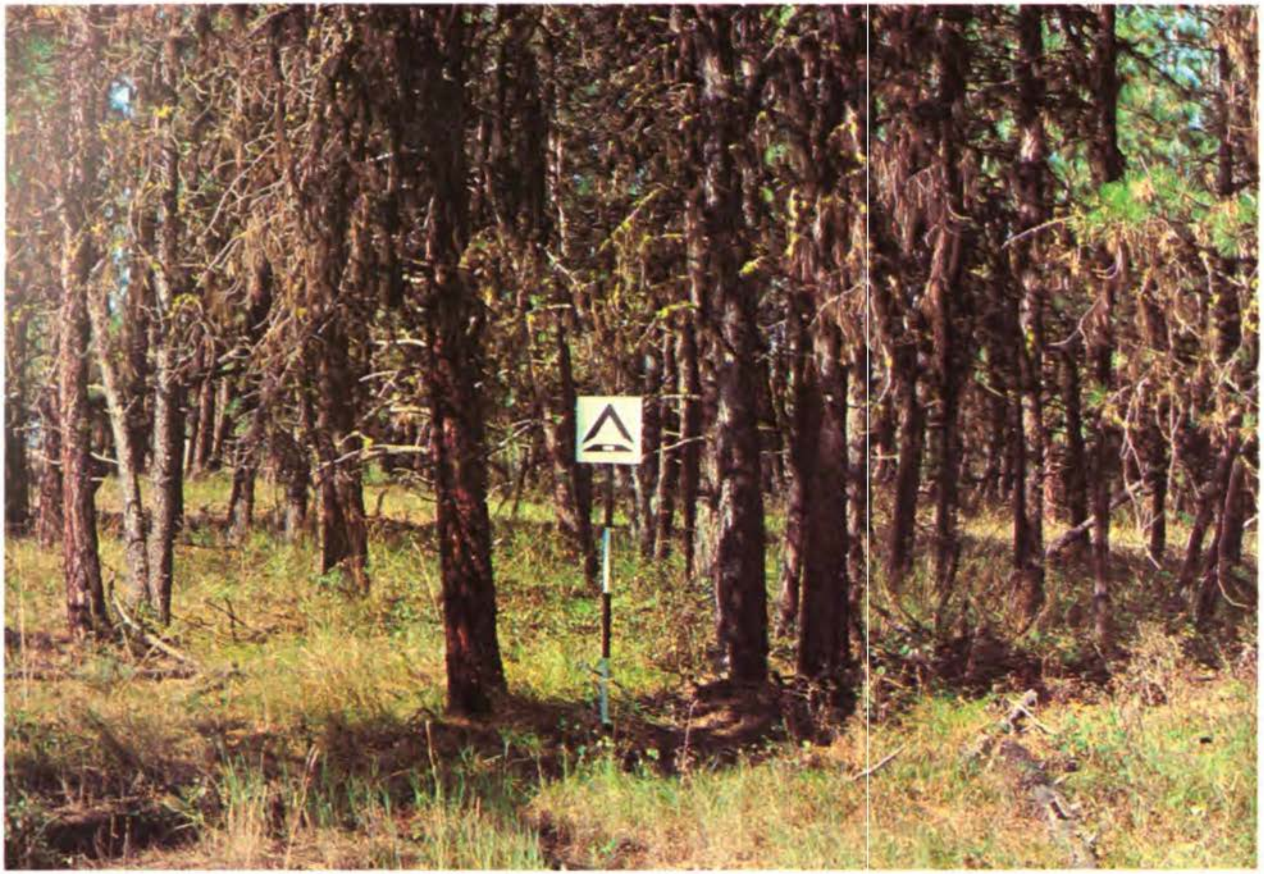
Spread rate (chains/hour) 4

Flame length (feet) 3

Resistance to suppression(chains/man-hour) 4

Ecoclass coding CPS2-12

REMARKS



2-PP-2

DATA SHEET

Residue descriptive code 2-PP-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.02	1
0.26- 1.0	1.5	91
1.1 - 3.0	1.5	100
3.1 - 9.0	3.4	301
9.1 -20.0	2.1	222
20.1+	0	0
Total	8.52	715

OTHER MEASUREMENTS

Average residue depth (feet) 0.2
Ground area covered by residue (percent) 61
Average duff and litter depth (inches) 1.2
Ground area covered by duff and litter (percent) 96
Sound residue 3.1-inch diameter and larger (percent) 64
Rotten residue 3.1-inch diameter and larger (percent) 36

STAND INFORMATION

Trees over 20-inch d.b.h.
Dominant species
Trees per acre
Average d.b.h. (inches)
Average tree height (feet)
Average crown height (feet)
Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.
Dominant species ponderosa pine
Trees per acre 450
Average d.b.h. (inches) 4
Average tree height (feet) 27
Average crown height (feet) 18
Estimated crown space occupied (percent) 20

Trees 8- to 20-inch d.b.h.
Dominant species ponderosa pine
Trees per acre 145
Average d.b.h. (inches) 10
Average tree height (feet) 49
Average crown height (feet) 22
Estimated crown space 30

Snags 8-inch d.b.h. and over
Number per acre 26
Average d.b.h. 10
Average height 48

BRUSH INFORMATION

Dominant species snowberry
Average height (inches) 11
Average crown height (inches) 6
Ground space occupied (percent) 20

GRASS AND FORBS INFORMATION

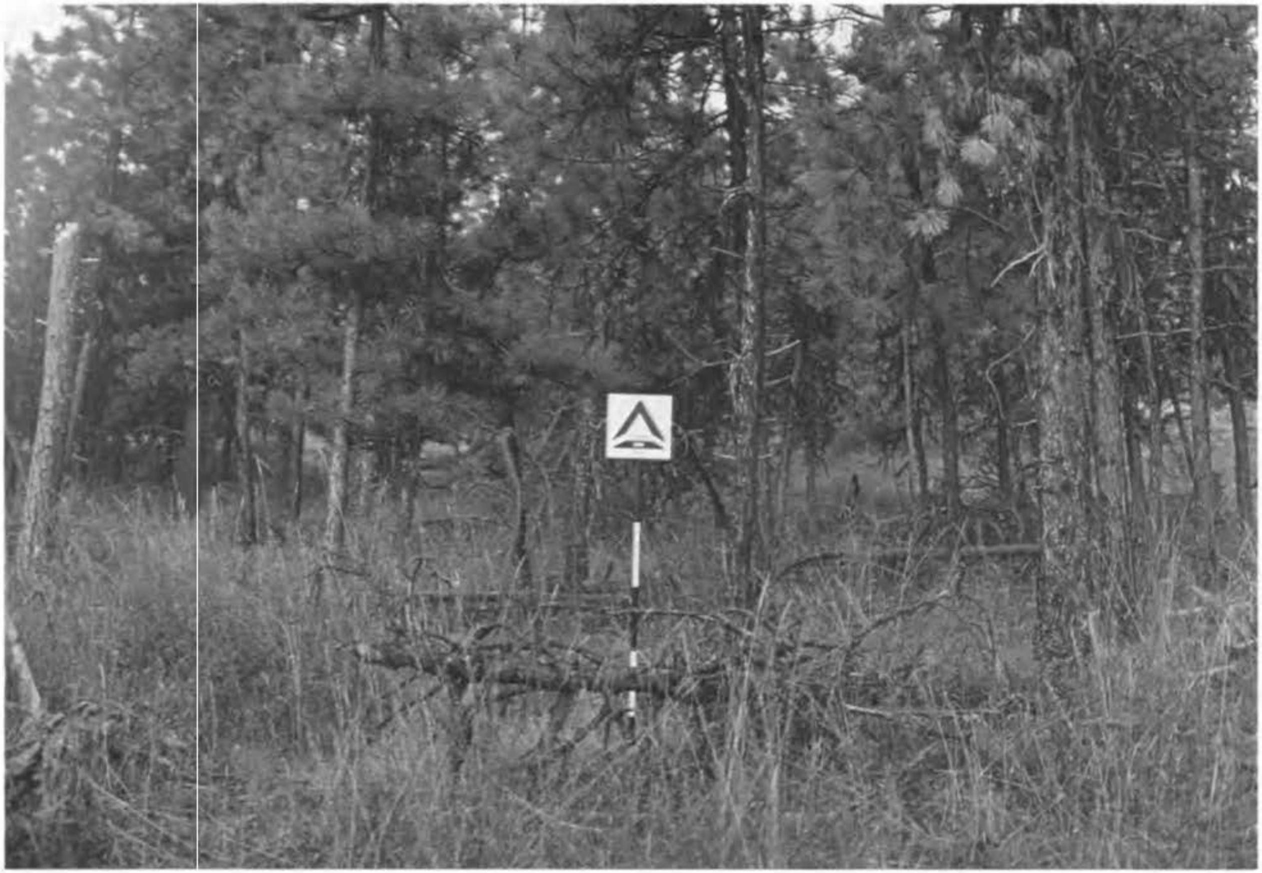
Dominant species pinegrass
Average height (inches) 9
Ground space (percent) 20
Estimated weight (pounds per acre) 600

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 5
Flame length (feet) 4
Resistance to suppression(chains/man-hour) 1.3

Ecoclass coding CDS6-11

REMARKS



3-PP-2

DATA SHEET

Residue descriptive code 3-PP-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.1	4
0.26- 1.0	1.0	62
1.1 - 3.0	2.5	162
3.1 - 9.0	2.3	215
9.1 -20.0	3.4	360
20.1+	4.5	478
Total	13.8	1,281

OTHER MEASUREMENTS

Average residue depth	(feet)	0.2
Ground area covered by residue	(percent)	84
Average duff and litter depth	(inches)	1.2
Ground area covered by duff and litter	(percent)	96
Sound residue 3.1-inch diameter and larger	(percent)	35
Rotten residue 3.1-inch diameter and larger	(percent)	65

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 150

Average d.b.h. (inches) 6

Average tree height (feet) 21

Average crown height (feet) 12

Estimated crown space occupied (percent) 30

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 81

Average d.b.h. (inches) 11

Average tree height (feet) 41

Average crown height (feet) 29

Estimated crown space 30

Snags 8-inch d.b.h. and over

Number per acre 8

Average d.b.h. 13

Average height 13

BRUSH INFORMATION

Dominant species bitterbrush

Average height (inches) 23

Average crown height (inches) 14

Ground space occupied (percent) 16

GRASS AND FORBS INFORMATION

Dominant species bluebunch wheatgrass

Average height (inches) 12

Ground space (percent) 30

Estimated weight (pounds per acre) 600

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

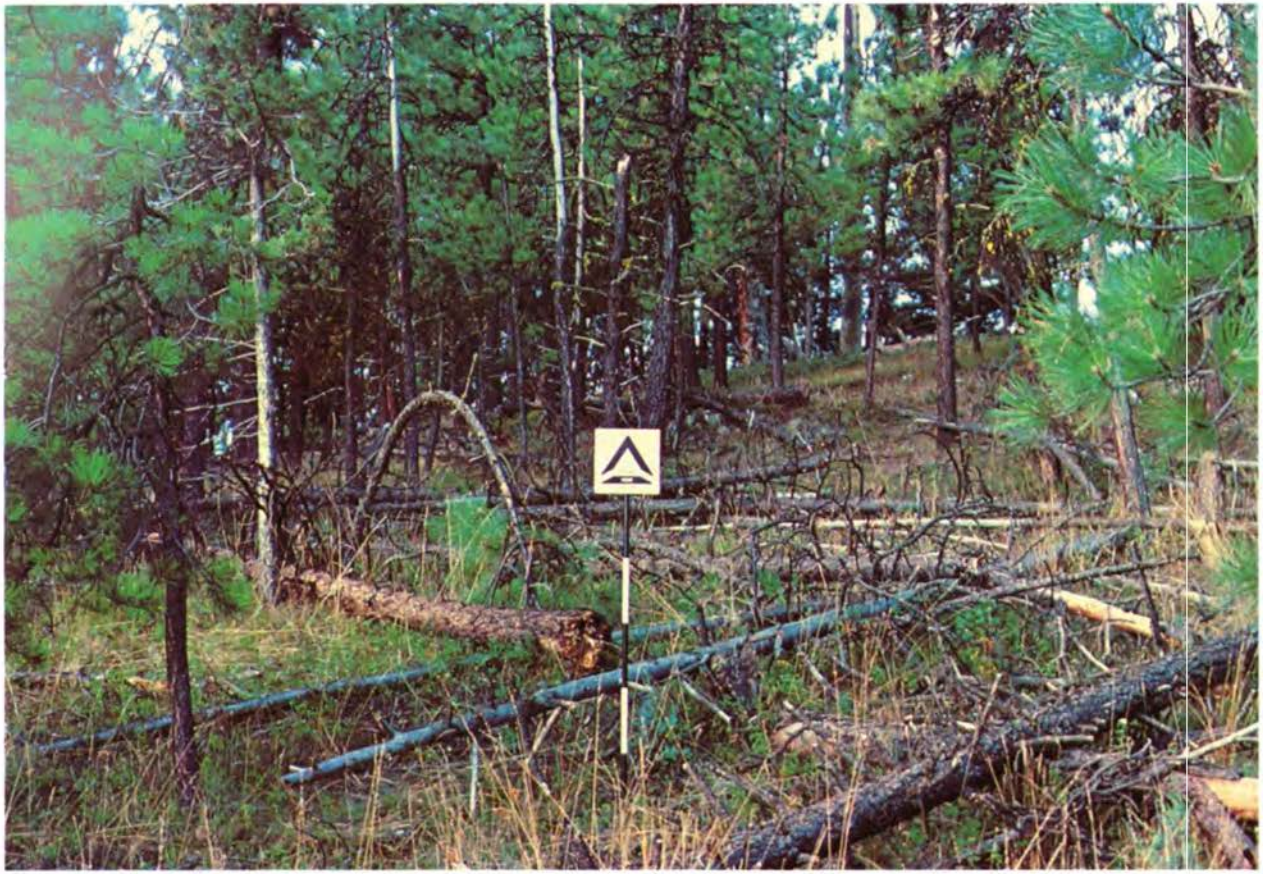
Spread rate (chains/hour) 8

Flame length (feet) 5

Resistance to suppression(chains/man-hour) 1.3

Ecoclass coding CPG1-11

REMARKS



4-PP-2

DATA SHEET

Residue descriptive code 4-PP-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	4
0.26- 1.0	2.7	162
1.1 - 3.0	3.7	239
3.1 - 9.0	8.6	696
9.1 -20.0	7.9	631
20.1+	16.2	1,369
Total	39.2	3,101

OTHER MEASUREMENTS

Average residue depth	(feet)	0.4
Ground area covered by residue	(percent)	71
Average duff and litter depth	(inches)	1.0
Ground area covered by duff and litter	(percent)	89
Sound residue 3.1-inch diameter and larger	(percent)	92
Rotten residue 3.1-inch diameter and larger	(percent)	8

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 200

Average d.b.h. (inches) 4

Average tree height (feet) 19

Average crown height (feet) 8

Estimated crown space occupied (percent) 20

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 61

Average d.b.h. (inches) 10

Average tree height (feet) 42

Average crown height (feet) 28

Estimated crown space 30

Snags 8-inch d.b.h. and over

Number per acre 23

Average d.b.h. 14

Average height 35

BRUSH INFORMATION

Dominant species wildrose

Average height (inches) 12

Average crown height (inches) 6

Ground space occupied (percent) 6

GRASS AND FORBS INFORMATION

Dominant species pinegrass

Average height (inches) 6

Ground space (percent) 46

Estimated weight (pounds per acre) 700

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 9

Flame length (feet) 6

Resistance to suppression(chains/man-hour) 1.2

Ecoclass coding CWG1-11

REMARKS

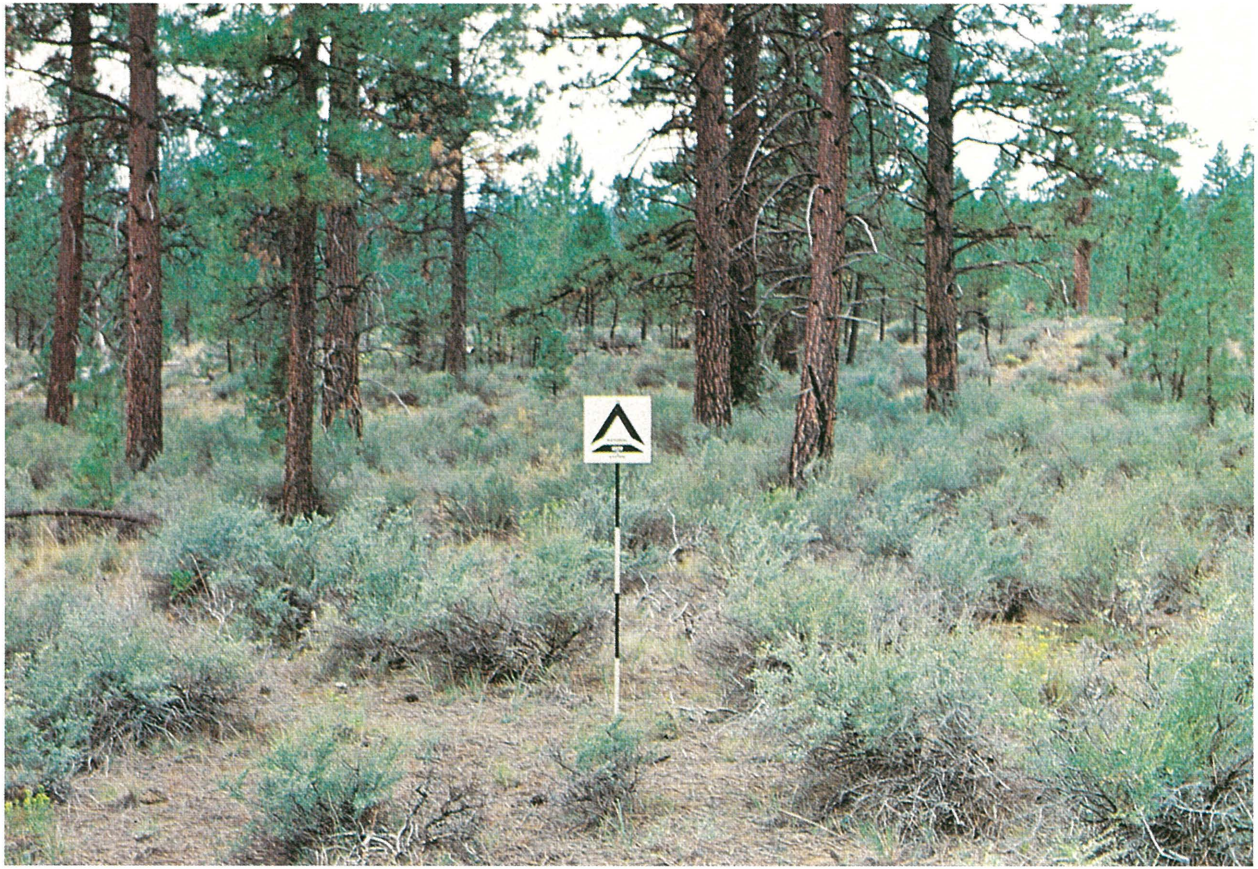
PONDEROSA PINE

SIZE CLASS 3

A SERIES OF 8 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



1-PP-3-B

DATA SHEET

Residue descriptive code 1-PP-3-B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	6
0.26- 1.0	.4	21
1.1 - 3.0	.7	43
3.1 - 9.0	.4	33
9.1 -20.0	0	0
20.1+	0	0
Total	1.6	103

OTHER MEASUREMENTS

Average residue depth (feet) 0.1

Ground area covered by residue (percent) 48

Average duff and litter depth (inches) 1.8

Ground area covered by duff and litter (percent) 95

Sound residue 3.1-inch diameter and larger (percent) 95

Rotten residue 3.1-inch diameter and larger (percent) 5

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 12

Average d.b.h. (inches) 27

Average tree height (feet) 81

Average crown height (feet) 19

Estimated crown space occupied (percent) 5

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 50

Average d.b.h. (inches) 1

Average tree height (feet) 3

Average crown height (feet) 2

Estimated crown space occupied (percent) 1

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 23

Average d.b.h. (inches) 16

Average tree height (feet) 58

Average crown height (feet) 18

Estimated crown space 20

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species bitterbrush

Average height (inches) 23

Average crown height (inches) 5

Ground space occupied (percent) 18

GRASS AND FORBS INFORMATION

Dominant species Idaho fescue

Average height (inches) 5

Ground space (percent) 4

Estimated weight (pounds per acre) 120

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

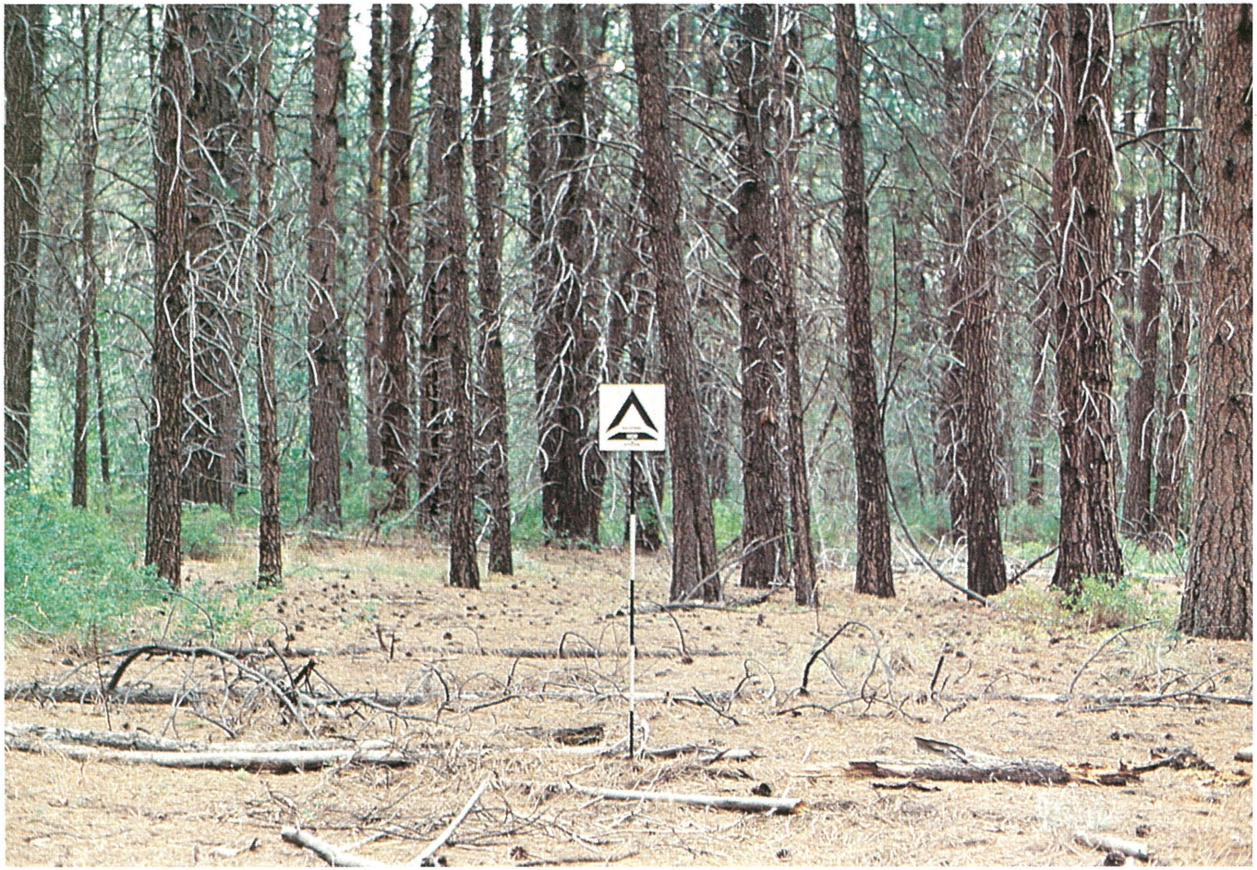
Spread rate (chains/hour) 6

Flame length (feet) 3

Resistance to suppression (chains/man-hour) 3

Ecoclass coding CPS2-11

REMARKS



2-PP-3-B

DATA SHEET

Residue descriptive code 2-PP-3 -B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.03	2
0.26- 1.0	.9	51
1.1 - 3.0	2.0	133
3.1 - 9.0	3.5	309
9.1 -20.0	0	0
20.1+	0	0
Total	6.43	495

OTHER MEASUREMENTS

Average residue depth (feet) 0.1

Ground area covered by residue (percent) 31

Average duff and litter depth (inches) 3.2

Ground area covered by duff and litter (percent) 100

Sound residue 3.1-inch diameter and larger (percent) 84

Rotten residue 3.1-inch diameter and larger (percent) 16

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 36

Average d.b.h. (inches) 25

Average tree height (feet) 120

Average crown height (feet) 62

Estimated crown space occupied (percent) 30

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 116

Average d.b.h. (inches) 17

Average tree height (feet) 100

Average crown height (feet) 60

Estimated crown space 40

Trees and dead stems under 8-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Snags 8-inch d.b.h. and over

Number per acre 64

Average d.b.h. 17

Average height 74

BRUSH INFORMATION

Dominant species spirea

Average height (inches) 25

Average crown height (inches) 10

Ground space occupied (percent) 10

GRASS AND FORBS INFORMATION

Dominant species Idaho fescue

Average height (inches) 3

Ground space (percent) 4

Estimated weight (pounds per acre) 25

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

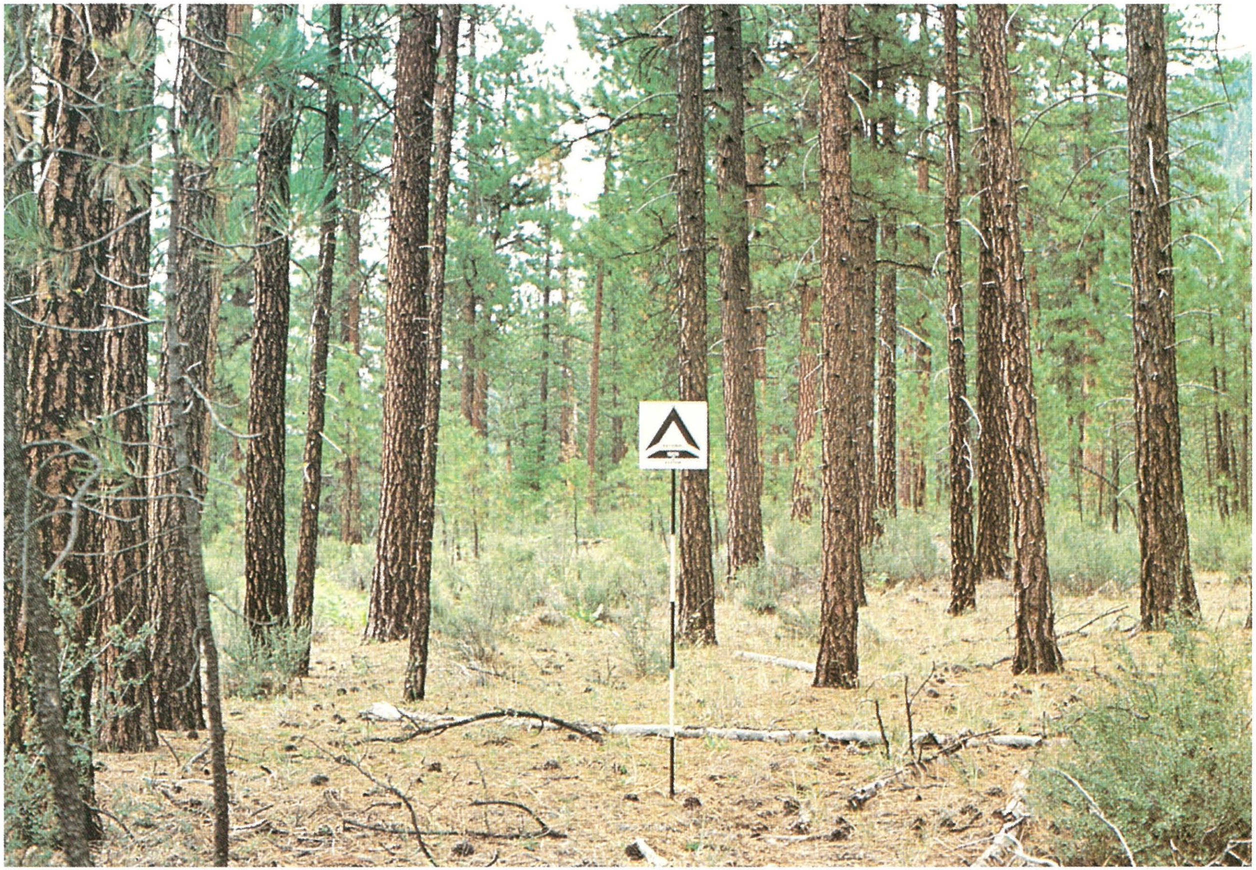
Spread rate (chains/hour) 3

Flame length (feet) 2

Resistance to suppression(chains/man-hour) 1.3

Ecoclass coding CPS2-11

REMARKS



3-PP-3 - B

DATA SHEET

Residue descriptive code 3-PP-3 - B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.1	7
0.26- 1.0	0.6	34
1.1 - 3.0	1.6	105
3.1 - 9.0	0.4	32
9.1 -20.0	0	0
20.1+	5.6	448
Total	8.3	626

OTHER MEASUREMENTS

Average residue depth (feet) 0.1
Ground area covered by residue (percent) 45
Average duff and litter depth (inches) 1.6
Ground area covered by duff and litter (percent) 99
Sound residue 3.1-inch diameter and larger (percent) 100
Rotten residue 3.1-inch diameter and larger (percent) 0

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species
Trees per acre
Average d.b.h. (inches)
Average tree height (feet)
Average crown height (feet)
Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine
Trees per acre 50
Average d.b.h. (inches) 1
Average tree height (feet) 2
Average crown height (feet) 1
Estimated crown space occupied (percent) 1

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine
Trees per acre 186
Average d.b.h. (inches) 16
Average tree height (feet) 94
Average crown height (feet) 39
Estimated crown space 30

Snags 8-inch d.b.h. and over

Number per acre
Average d.b.h.
Average height

BRUSH INFORMATION

Dominant species bitterbrush
Average height (inches) 27
Average crown height (inches) 6
Ground space occupied (percent) 9

GRASS AND FORBS INFORMATION

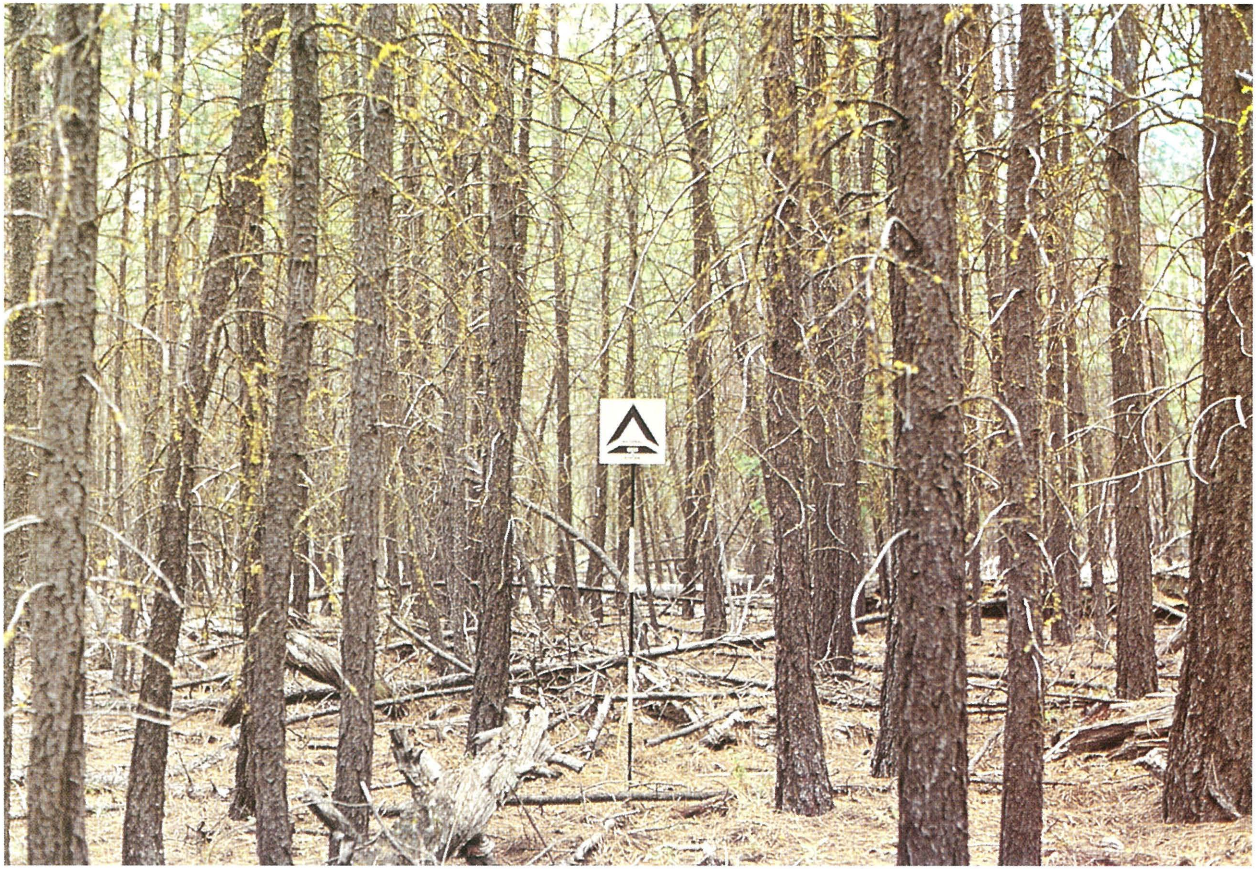
Dominant species bottlebrush squirreltai
Average height (inches) 8
Ground space (percent) 3
Estimated weight (pounds per acre) 30

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 4
Flame length (feet) 3
Resistance to suppression(chains/man-hour) 6

Ecoclass coding CPS2-12

REMARKS



4-PP-3 -B

DATA SHEET

Residue descriptive code 4-PP-3 ←B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	5
0.26- 1.0	1.6	98
1.1 - 3.0	4.2	277
3.1 - 9.0	2.1	179
9.1 -20.0	2.9	311
20.1+	4.7	506
Total	15.6	1,376

OTHER MEASUREMENTS

Average residue depth (feet) 0.2

Ground area covered by residue (percent) 61

Average duff and litter depth (inches) 1.6

Ground area covered by duff and litter (percent) 95

Sound residue 3.1-inch diameter and larger (percent) 49

Rotten residue 3.1-inch diameter and larger (percent) 51

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 815

Average d.b.h. (inches) 5

Average tree height (feet) 30

Average crown height (feet) 21

Estimated crown space occupied (percent) 50

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 37

Average d.b.h. (inches) 10

Average tree height (feet) 45

Average crown height (feet) 26

Estimated crown space 10

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species

Average height (inches)

Average crown height (inches)

Ground space occupied (percent)

GRASS AND FORBS INFORMATION

Dominant species

Average height (inches)

Ground space (percent)

Estimated weight (pounds per acre)

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

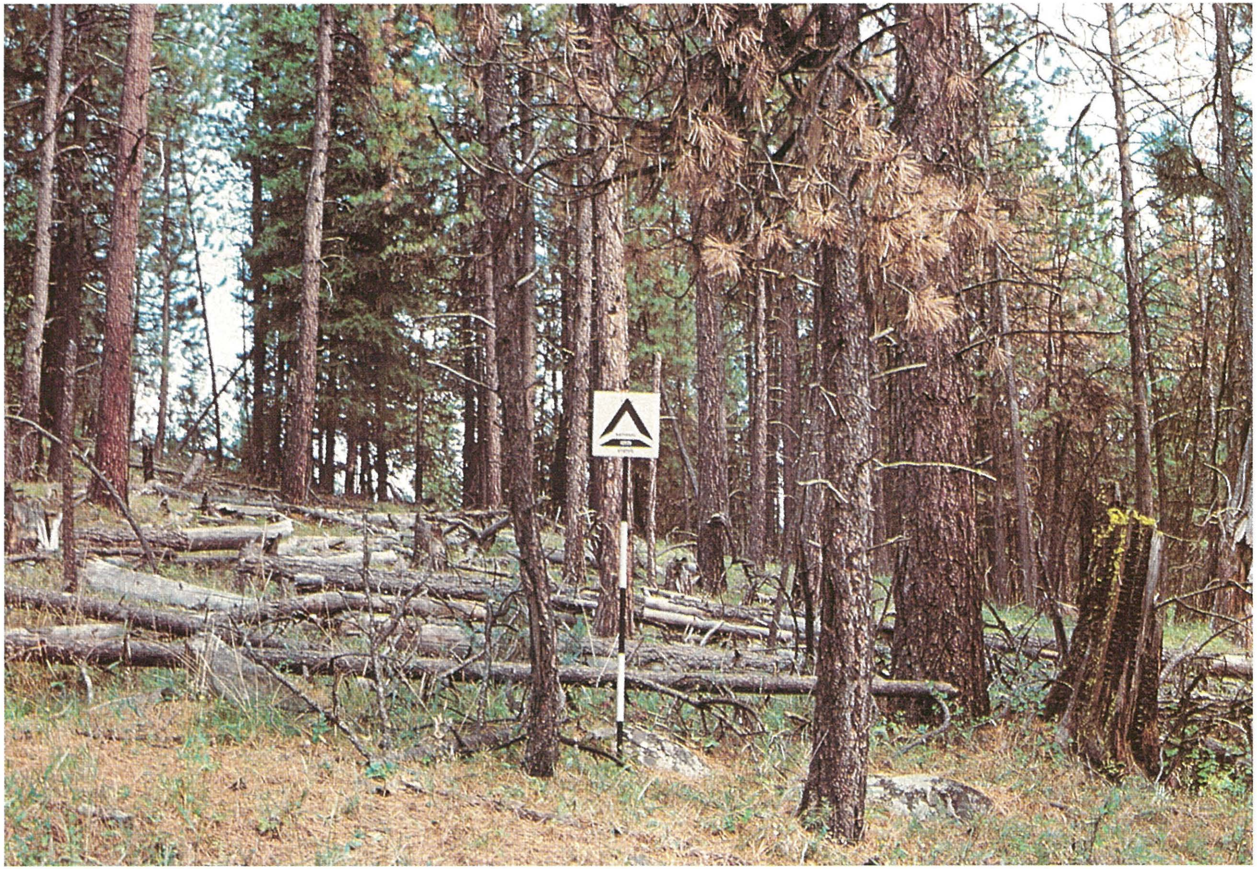
Spread rate (chains/hour) 3

Flame length (feet) 3

Resistance to suppression (chains/man-hour) 1.7

Ecoclass coding CPS2-12

REMARKS



5-PP-3 - B

DATA SHEET

Residue descriptive code 5-PP-3 -- B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	4
0.26- 1.0	1.1	68
1.1 - 3.0	2.5	162
3.1 - 9.0	10.3	892
9.1 -20.0	6.0	516
20.1+	0	0
Total	20.0	1,642

OTHER MEASUREMENTS

Average residue depth	(feet)	0.2
Ground area covered by residue	(percent)	39
Average duff and litter depth	(inches)	1.1
Ground area covered by duff and litter	(percent)	100
Sound residue 3.1-inch diameter and larger	(percent)	81
Rotten residue 3.1-inch diameter and larger	(percent)	19

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 3

Average d.b.h. (inches) 29

Average tree height (feet) 95

Average crown height (feet) 10

Estimated crown space occupied (percent) 1

Trees and dead stems under 8-inch d.b.h.

Dominant species ______

Trees per acre ______

Average d.b.h. (inches) ______

Average tree height (feet) ______

Average crown height (feet) ______

Estimated crown space occupied (percent) ______

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 50

Average d.b.h. (inches) 16

Average tree height (feet) 77

Average crown height (feet) 35

Estimated crown space 20

Snags 8-inch d.b.h. and over

Number per acre 132

Average d.b.h. 13

Average height 31

BRUSH INFORMATION

Dominant species snowberry

Average height (inches) 7

Average crown height (inches) 3

Ground space occupied (percent) 21

GRASS AND FORBS INFORMATION

Dominant species pinegrass

Average height (inches) 10

Ground space (percent) 28

Estimated weight (pounds per acre) 250

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

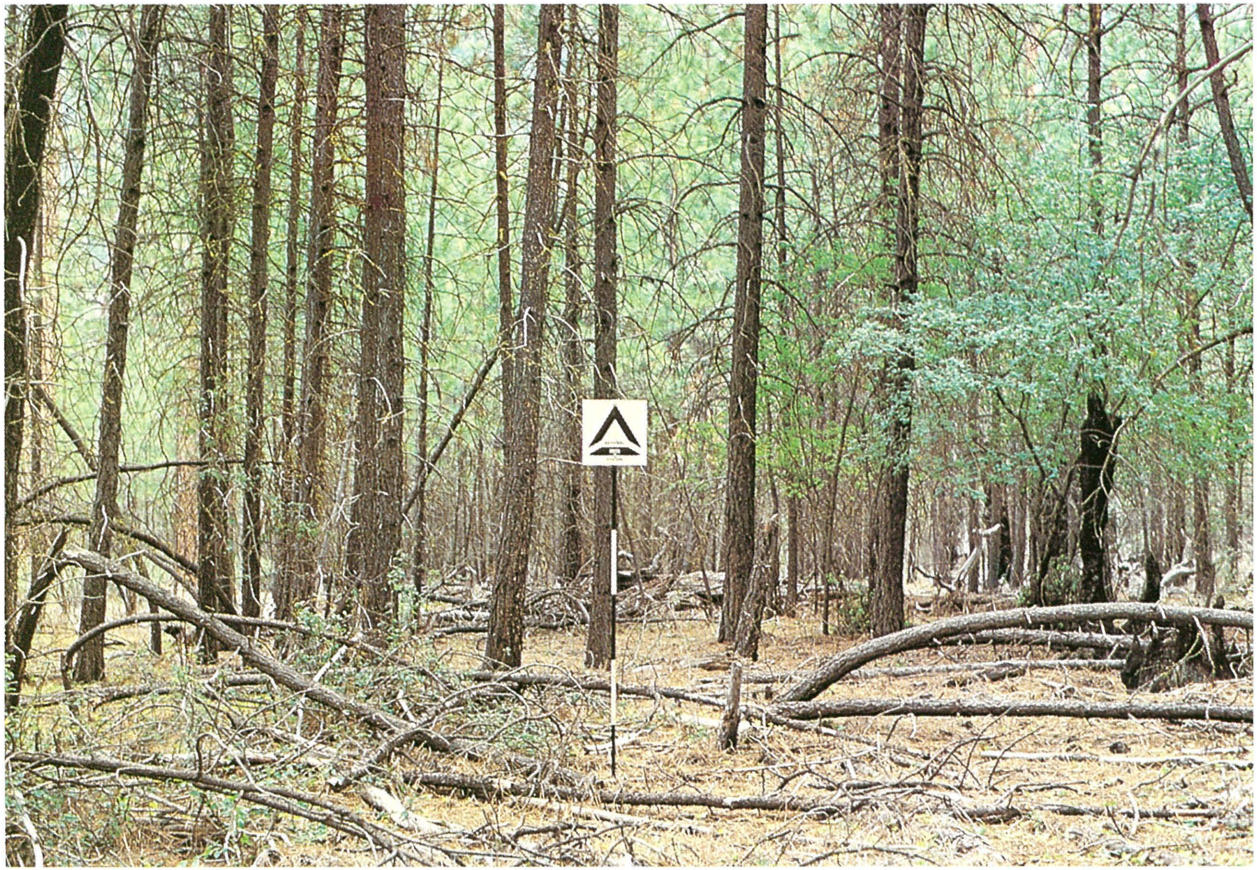
Spread rate (chains/hour) 6

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 1.2

Ecoclass coding CDS6-11

REMARKS



6-PP-3-B

DATA SHEET

Residue descriptive code 6-PP-3 -B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.2	10
0.26- 1.0	2.0	116
1.1 - 3.0	3.6	234
3.1 - 9.0	3.4	293
9.1 -20.0	7.7	726
20.1+	3.2	337
Total	20.1	1,716

OTHER MEASUREMENTS

Average residue depth (feet) 0.3

Ground area covered by residue (percent) 65

Average duff and litter depth (inches) 1.8

Ground area covered by duff and litter (percent) 95

Sound residue 3.1-inch diameter and larger (percent) 59

Rotten residue 3.1-inch diameter and larger (percent) 41

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 3

Average d.b.h. (inches) 29

Average tree height (feet) 103

Average crown height (feet) 30

Estimated crown space occupied (percent) 1

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 350

Average d.b.h. (inches) 2

Average tree height (feet) 21

Average crown height (feet) 13

Estimated crown space occupied (percent) 30

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 48

Average d.b.h. (inches) 10

Average tree height (feet) 52

Average crown height (feet) 28

Estimated crown space 20

Snags 8-inch d.b.h. and over

Number per acre 2

Average d.b.h. 17

Average height 10

BRUSH INFORMATION

Dominant species serviceberry

Average height (inches) 12

Average crown height (inches) 2

Ground space occupied (percent) 4

GRASS AND FORBS INFORMATION

Dominant species balsamroot

Average height (inches) 3

Ground space (percent) 1

Estimated weight (pounds per acre) 10

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

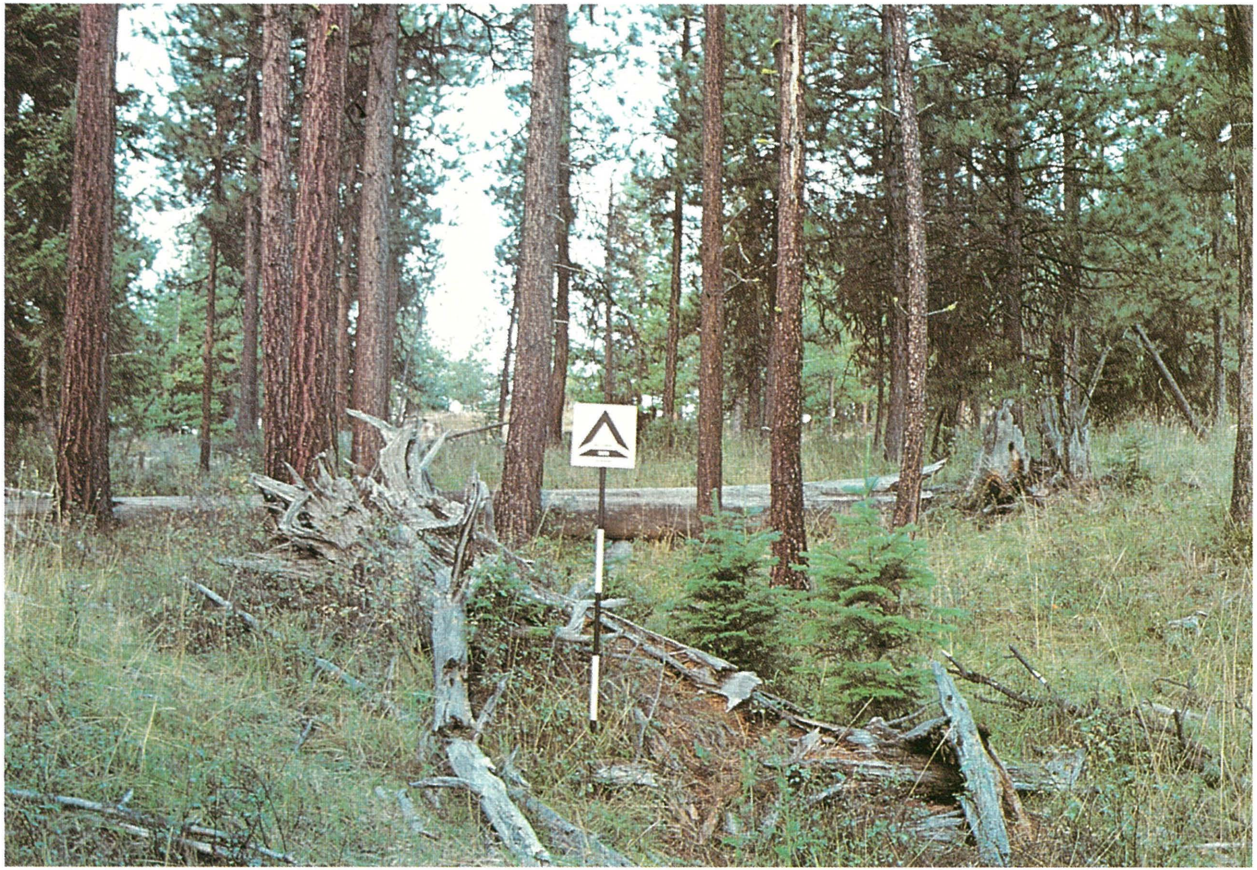
Spread rate (chains/hour) 4

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 2

Ecoclass coding CPS2-12

REMARKS



7-PP-3 - B

DATA SHEET

Residue descriptive code 7-PP-3 - B

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.1	3
0.26- 1.0	.7	43
1.1 - 3.0	.8	52
3.1 - 9.0	1.3	114
9.1 -20.0	6.3	522
20.1+	13.5	1,083
Total	22.7	1,817

OTHER MEASUREMENTS

Average residue depth (feet) 0.3

Ground area covered by residue (percent) 73

Average duff and litter depth (inches) 2.2

Ground area covered by duff and litter (percent) 96

Sound residue 3.1-inch diameter and larger (percent) 93

Rotten residue 3.1-inch diameter and larger (percent) 7

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 1

Average d.b.h. (inches) 23

Average tree height (feet) 66

Average crown height (feet) 61

Estimated crown space occupied (percent) 1

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 57

Average d.b.h. (inches) 14

Average tree height (feet) 64

Average crown height (feet) 40

Estimated crown space 30

Trees and dead stems under 8-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Snags 8-inch d.b.h. and over

Number per acre 3

Average d.b.h. 26

Average height 52

BRUSH INFORMATION

Dominant species wildrose

Average height (inches) 26

Average crown height (inches) 16

Ground space occupied (percent) 20

GRASS AND FORBS INFORMATION

Dominant species pinegrass

Average height (inches) 8

Ground space (percent) 63

Estimated weight (pounds per acre) 500

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

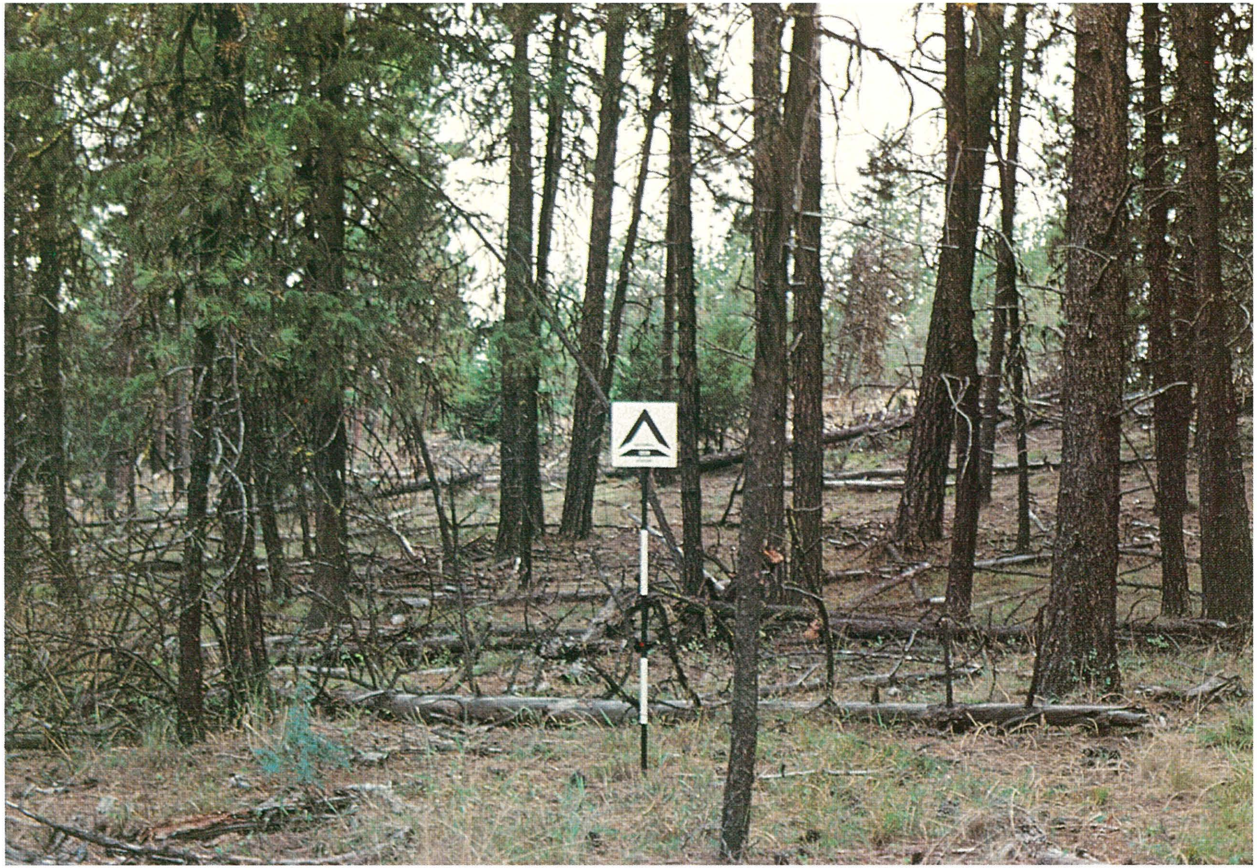
Spread rate (chains/hour) 10

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 1.1

Ecoclass coding CWG1-11

REMARKS



8-PP-3-B

DATA SHEET

Residue descriptive code 8-PP-3

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.04	2
0.26- 1.0	2.5	150
1.1 - 3.0	6.9	449
3.1 - 9.0	8.1	657
9.1 -20.0	8.4	706
20.1+	3.6	287
Total	29.54	2,251

OTHER MEASUREMENTS

Average residue depth (feet) 0.3

Ground area covered by residue (percent) 67

Average duff and litter depth (inches) .6

Ground area covered by duff and litter (percent) 73

Sound residue 3.1-inch diameter and larger (percent) 94

Rotten residue 3.1-inch diameter and larger (percent) 6

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 6

Average d.b.h. (inches) 25

Average tree height (feet) 95

Average crown height (feet) 40

Estimated crown space occupied (percent) 5

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 135

Average d.b.h. (inches) 12

Average tree height (feet) 70

Average crown height (feet) 37

Estimated crown space 20

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 200

Average d.b.h. (inches) 2

Average tree height (feet) 11

Average crown height (feet) 5

Estimated crown space occupied (percent) 10

Snags 8-inch d.b.h. and over

Number per acre 9

Average d.b.h. 12

Average height 20

BRUSH INFORMATION

Dominant species snowberry

Average height (inches) 11

Average crown height (inches) 6

Ground space occupied (percent) 5

GRASS AND FORBS INFORMATION

Dominant species pinegrass

Average height (inches) 8

Ground space (percent) 13

Estimated weight (pounds per acre) 200

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 6

Flame length (feet) 5

Resistance to suppression(chains/man-hour) 2

Ecoclass coding CWG1-12

REMARKS

PONDEROSA PINE

SIZE CLASS 4

A SERIES OF 8 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.

1--PP-4

DATA SHEET

Residue descriptive code 1-PP-4

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.04	2
0.26- 1.0	.2	13
1.1 - 3.0	.5	29
3.1 - 9.0	.1	9
9.1 -20.0	0	0
20.1+	0	0
Total	.84	53

OTHER MEASUREMENTS

Average residue depth	(feet)	0.02
Ground area covered by residue	(percent)	12
Average duff and litter depth	(inches)	.4
Ground area covered by duff and litter	(percent)	73
Sound residue 3.1-inch diameter and larger	(percent)	90
Rotten residue 3.1-inch diameter and larger	(percent)	10

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 24

Average d.b.h. (inches) 33

Average tree height (feet) 132

Average crown height (feet) 43

Estimated crown space occupied (percent) 30

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 27

Average d.b.h. (inches) 12

Average tree height (feet) 38

Average crown height (feet) 6

Estimated crown space 20

Trees and dead stems under 8-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species wildrose

Average height (inches) 21

Average crown height (inches) 12

Ground space occupied (percent) 9

GRASS AND FORBS INFORMATION

Dominant species cheatgrass

Average height (inches) 17

Ground space (percent) 47

Estimated weight (pounds per acre) 650

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

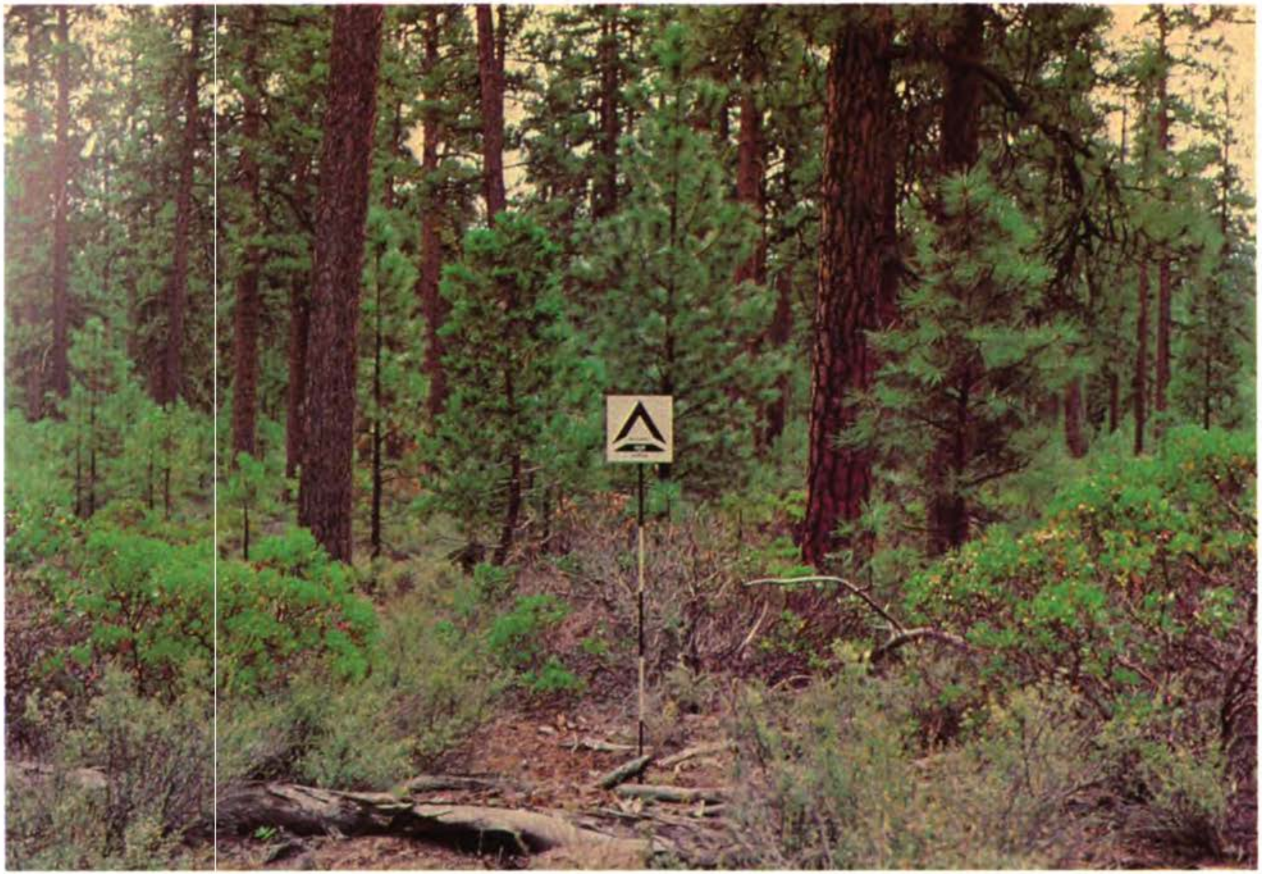
Spread rate (chains/hour) 44

Flame length (feet) 3

Resistance to suppression(chains/man-hour) 3

Ecoclass coding CDG1-11

REMARKS



2-PP-4

DATA SHEET

Residue descriptive code 2-PP-4

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.3	15
0.26- 1.0	.8	48
1.1 - 3.0	.8	52
3.1 - 9.0	.5	49
9.1 -20.0	3.6	316
20.1+	0	0
Total	6.0	480

OTHER MEASUREMENTS

Average residue depth	(feet)	0.1
Ground area covered by residue	(percent)	65
Average duff and litter depth	(inches)	1.4
Ground area covered by duff and litter	(percent)	91
Sound residue 3.1-inch diameter and larger	(percent)	76
Rotten residue 3.1-inch diameter and larger	(percent)	24

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 15

Average d.b.h. (inches) 28

Average tree height (feet) 109

Average crown height (feet) 36

Estimated crown space occupied (percent) 10

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 400

Average d.b.h. (inches) 2

Average tree height (feet) 9

Average crown height (feet) 3

Estimated crown space occupied (percent) 50

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 2

Average d.b.h. (inches) 20

Average tree height (feet) 100

Average crown height (feet) 55

Estimated crown space 1

Snags 8-inch d.b.h. and over

Number per acre ______

Average d.b.h. ______

Average height ______

BRUSH INFORMATION

Dominant species manzanita

Average height (inches) 25

Average crown height (inches) 6

Ground space occupied (percent) 39

GRASS AND FORBS INFORMATION

Dominant species ______

Average height (inches) ______

Ground space (percent) ______

Estimated weight (pounds per acre) ______

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

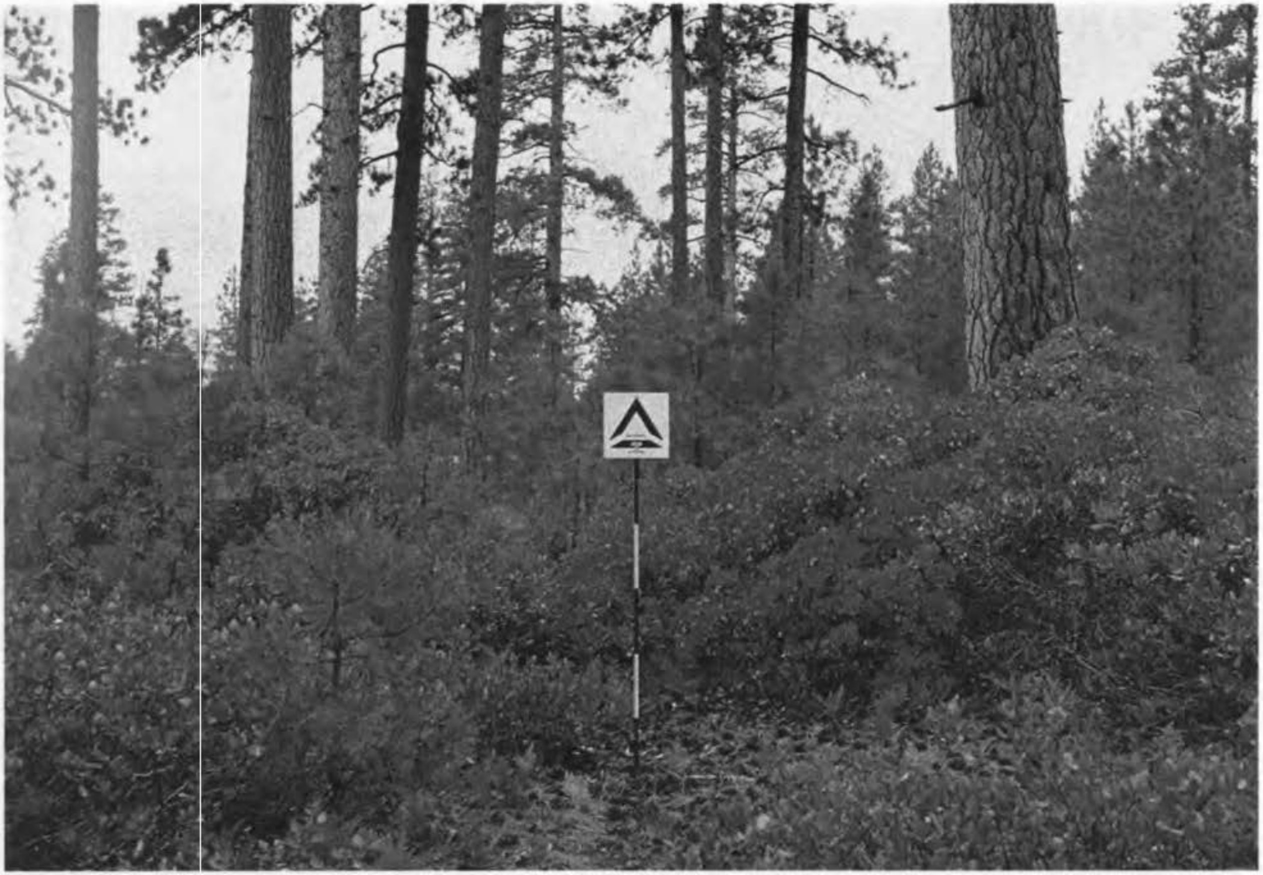
Spread rate (chains/hour) 10

Flame length (feet) 4

Resistance to suppression (chains/man-hour) 2

Ecoclass coding CPS2-13

REMARKS



3-PP-4

DATA SHEET

Residue descriptive code 3-PP-4

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.2	10
0.26- 1.0	1.1	64
1.1 - 3.0	1.0	62
3.1 - 9.0	.5	40
9.1 -20.0	4.8	386
20.1+	0	0
Total	7.6	562

OTHER MEASUREMENTS

Average residue depth (feet) 0.1

Ground area covered by residue (percent) 73

Average duff and litter depth (inches) 2.4

Ground area covered by duff and litter (percent) 97

Sound residue 3.1-inch diameter and larger (percent) 100

Rotten residue 3.1-inch diameter and larger (percent) 0

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 22

Average d.b.h. (inches) 31

Average tree height (feet) 128

Average crown height (feet) 43

Estimated crown space occupied (percent) 20

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 2,350

Average d.b.h. (inches) 2

Average tree height (feet) 4

Average crown height (feet) 2

Estimated crown space occupied (percent) 40

Trees 8- to 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species manzanita

Average height (inches) 23

Average crown height (inches) 8

Ground space occupied (percent) 22

GRASS AND FORBS INFORMATION

Dominant species bracken fern

Average height (inches) 9

Ground space (percent) 11

Estimated weight (pounds per acre) 50

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

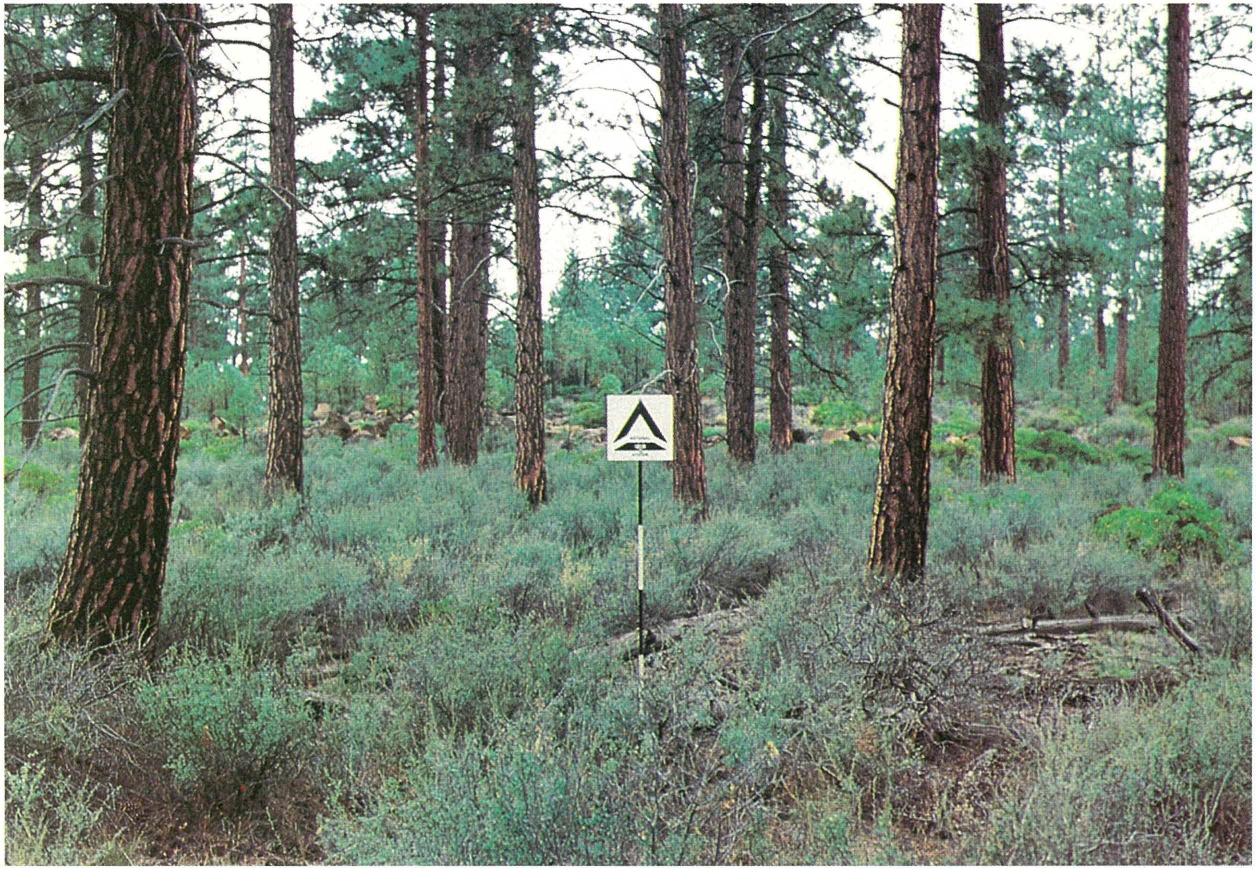
Spread rate (chains/hour) 6

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 1.7

Ecoclass coding CWC2-11

REMARKS



4-PP-4-B

DATA SHEET

Residue descriptive code 4-PP-4

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.2	13
0.26- 1.0	1.2	71
1.1 - 3.0	2.3	148
3.1 - 9.0	2.3	218
9.1 -20.0	2.4	253
20.1+	0	0
Total	8.4	703

OTHER MEASUREMENTS

Average residue depth	(feet)	0.2
Ground area covered by residue	(percent)	77
Average duff and litter depth	(inches)	2.0
Ground area covered by duff and litter	(percent)	97
Sound residue 3.1-inch diameter and larger	(percent)	55
Rotten residue 3.1-inch diameter and larger	(percent)	45

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 18

Average d.b.h. (inches) 24

Average tree height (feet) 88

Average crown height (feet) 20

Estimated crown space occupied (percent) 10

Trees and dead stems under 8-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 30

Average d.b.h. (inches) 17

Average tree height (feet) 73

Average crown height (feet) 24

Estimated crown space 20

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species bitterbrush

Average height (inches) 26

Average crown height (inches) 9

Ground space occupied (percent) 28

GRASS AND FORBS INFORMATION

Dominant species bluebunch wheatgrass

Average height (inches) 5

Ground space (percent) 5

Estimated weight (pounds per acre) 90

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

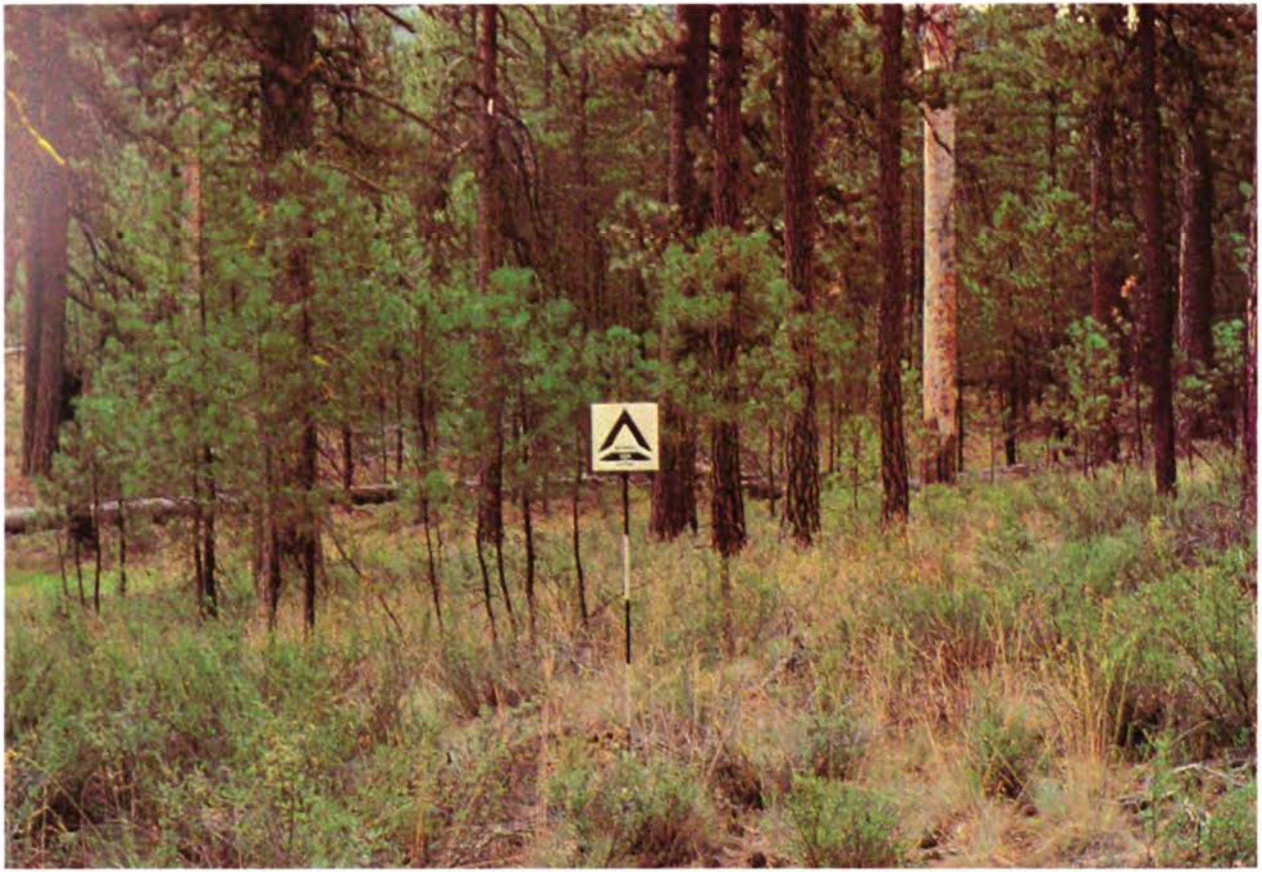
Spread rate (chains/hour) 9

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 1.3

Ecoclass coding CPS2-17

REMARKS



5-PP-4

DATA SHEET

Residue descriptive code 5-PP-4

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.1	4
0.26- 1.0	.8	5
1.1 - 3.0	.8	52
3.1 - 9.0	1.6	139
9.1 -20.0	5.2	511
20.1+	0	0
Total	8.5	711

OTHER MEASUREMENTS

Average residue depth	(feet)	0.4
Ground area covered by residue	(percent)	53
Average duff and litter depth	(inches)	2.8
Ground area covered by duff and litter	(percent)	97
Sound residue 3.1-inch diameter and larger	(percent)	52
Rotten residue 3.1-inch diameter and larger	(percent)	48

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 24

Average d.b.h. (inches) 29

Average tree height (feet) 110

Average crown height (feet) 33

Estimated crown space occupied (percent) 20

Trees 8- to 20-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 28

Average d.b.h. (inches) 16

Average tree height (feet) 73

Average crown height (feet) 31

Estimated crown space 20

Trees and dead stems under 8-inch d.b.h.

Dominant species ponderosa pine

Trees per acre 450

Average d.b.h. (inches) 1

Average tree height (feet) 7

Average crown height (feet) 5

Estimated crown space occupied (percent) 10

Snags 8-inch d.b.h. and over

Number per acre 1

Average d.b.h. 22

Average height 55

BRUSH INFORMATION

Dominant species bitterbrush

Average height (inches) 21

Average crown height (inches) 4

Ground space occupied (percent) 8

GRASS AND FORBS INFORMATION

Dominant species bluebunch wheatgrass

Average height (inches) 6

Ground space (percent) 15

Estimated weight (pounds per acre) 130

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 5

Flame length (feet) 3

Resistance to suppression(chains/man-hour) 1.5

Ecoclass coding CPS2-11

REMARKS

From PNW-105, 1980

Juniper

Digitized by Google

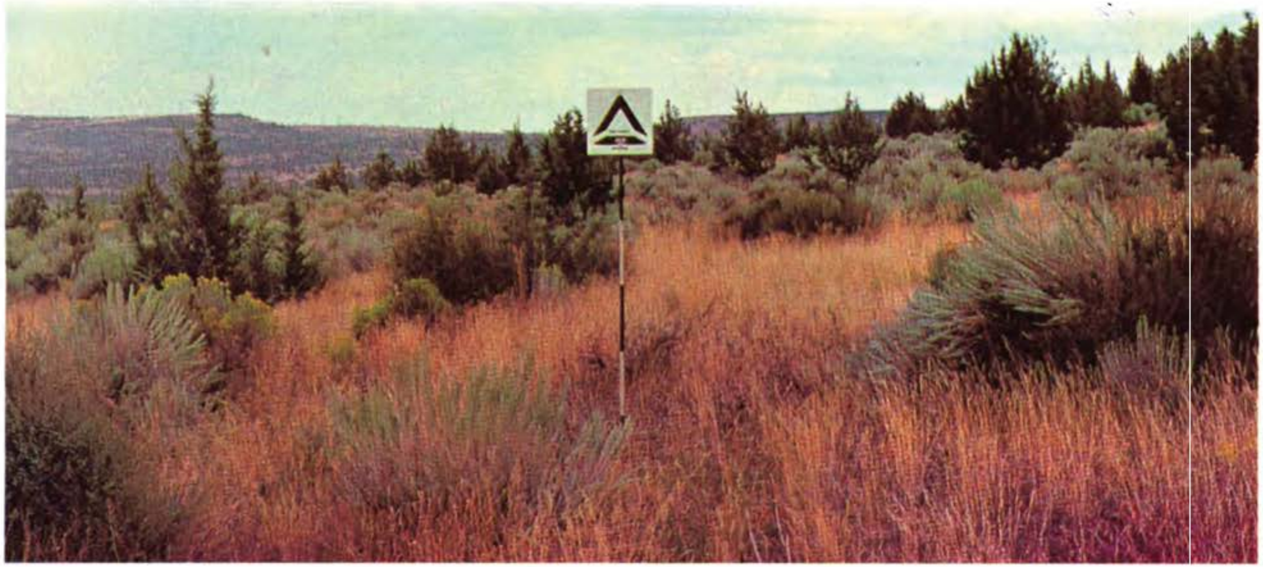
JUNIPER

SIZE CLASS 2

A SERIES OF 2 LEVELS

REMINDERS TO USERS:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



1-JU-2

DATA SHEET

Residue descriptive code 1-JU-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.0 - 0.25	0.2	14
0.26- 1.0	.4	27
1.1 - 3.0	.3	23
3.1 - 9.0	0	0
9.1 -20.0	0	0
20.1+	0	0
Total	.9	64

OTHER MEASUREMENTS

Average residue depth (feet) 0.1

Ground area covered by residue (percent) 24

Average duff and litter depth (inches) .2

Ground area covered by duff and litter (percent) 48

Sound residue 3.1-inch diameter and larger (percent) 0

Rotten residue 3.1-inch diameter and larger (percent) 0

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.

Dominant species juniper

Trees per acre 200

Average d.b.h. (inches) 1

Average tree height (feet) 6

Average crown height (feet) 0

Estimated crown space occupied (percent) 1

Trees 8- to 20-inch d.b.h.

Dominant species

Trees per acre

Average d.b.h. (inches)

Average tree height (feet)

Average crown height (feet)

Estimated crown space

Snags 8-inch d.b.h. and over

Number per acre

Average d.b.h.

Average height

BRUSH INFORMATION

Dominant species sagebrush

Average height (inches) 20

Average crown height (inches) 2

Ground space occupied (percent) 10

GRASS AND FORBS INFORMATION

Dominant species cheatgrass

Average height (inches) 16

Ground space (percent) 10

Estimated weight (pounds per acre) 150

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

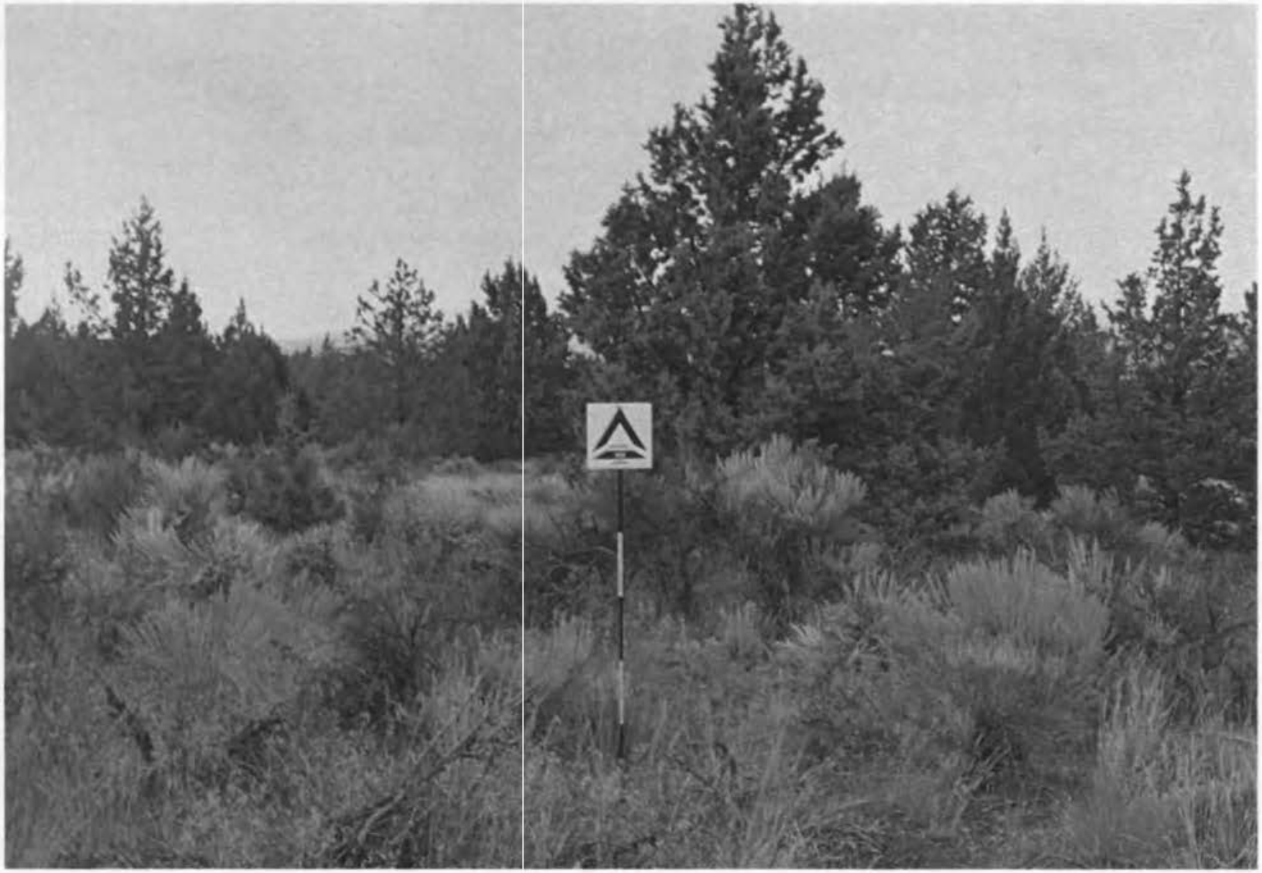
Spread rate (chains/hour) 12

Flame length (feet) 4

Resistance to suppression(chains/man-hour) 4

Ecoclass coding CJS2

REMARKS



2-JU-2

DATA SHEET

Residue descriptive code 2-JU-2

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft³/acre)
0.0 - 0.25	0.2	13
0.26- 1.0	.4	29
1.1 - 3.0	.8	65
3.1 - 9.0	0	0
9.1 -20.0	0	0
20.1+	0	0
Total	1.4	107

OTHER MEASUREMENTS

Average residue depth (feet) 0.1
Ground area covered by residue (percent) 23
Average duff and litter depth (inches) .3
Ground area covered by duff and litter (percent) 39
Sound residue 3.1-inch diameter and larger (percent) 0
Rotten residue 3.1-inch diameter and larger (percent) 0

STAND INFORMATION

Trees over 20-inch d.b.h.

Dominant species
Trees per acre
Average d.b.h. (inches)
Average tree height (feet)
Average crown height (feet)
Estimated crown space occupied (percent)

Trees and dead stems under 8-inch d.b.h.

Dominant species
Trees per acre
Average d.b.h. (inches)
Average tree height (feet)
Average crown height (feet)
Estimated crown space occupied (percent)

Trees 8- to 20-inch d.b.h.

Dominant species juniper
Trees per acre 13
Average d.b.h. (inches) 10
Average tree height (feet) 24
Average crown height (feet) 1
Estimated crown space 5

Snags 8-inch d.b.h. and over

Number per acre
Average d.b.h.
Average height

BRUSH INFORMATION

Dominant species sagebrush
Average height (inches) 26
Average crown height (inches) 12
Ground space occupied (percent) 7

GRASS AND FORBS INFORMATION

Dominant species bluebunch wheatgrass
Average height (inches) 17
Ground space (percent) <9
Estimated weight (pounds per acre) 100

ASSESSMENT OF FIRE BEHAVIOR AND SUPPRESSION DIFFICULTY

Spread rate (chains/hour) 3
Flame length (feet) 2
Resistance to suppression (chains/man-hour) 3

Ecoclass coding CJS2

REMARKS

From PNW-52, 1976

Ponderosa Pine

Digitized by Google

PONDEROSA PINE

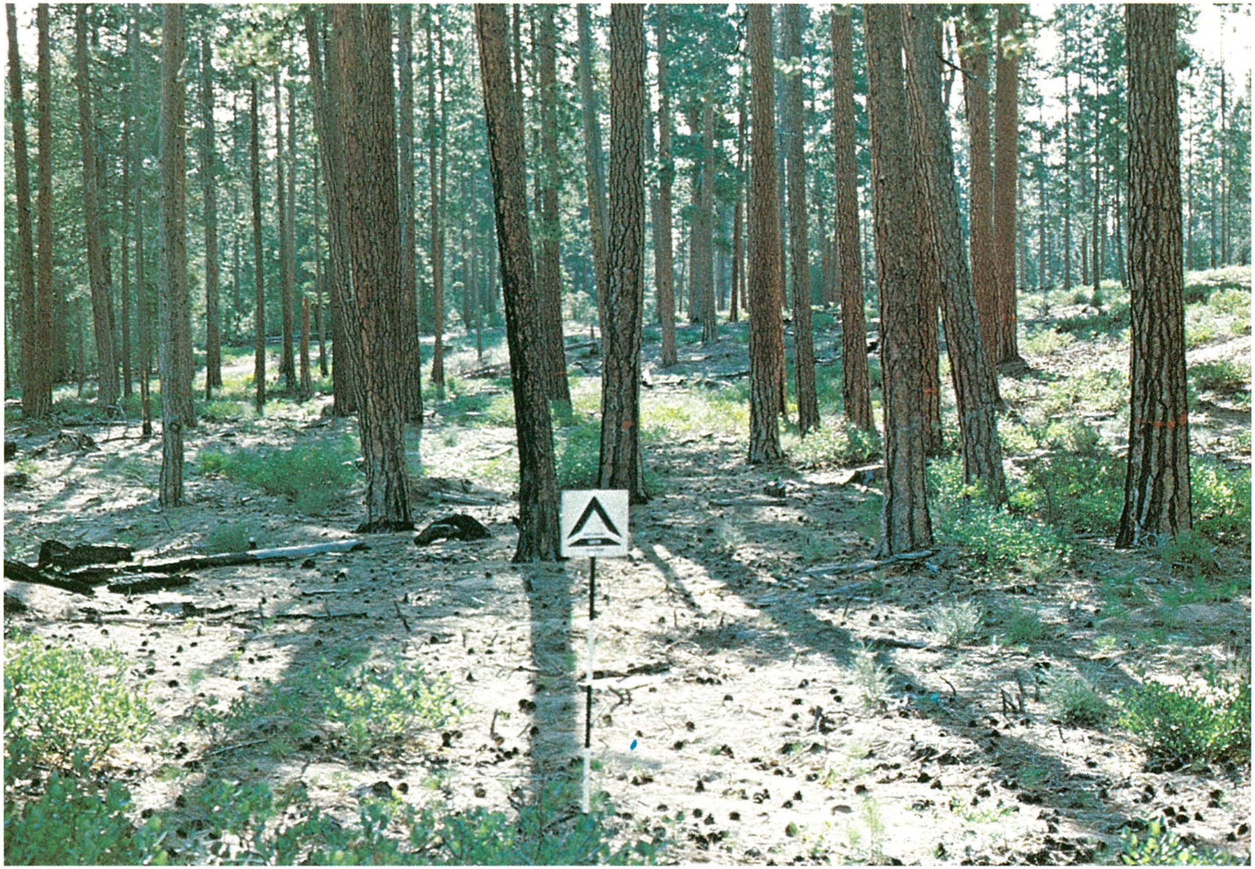
SIZE CLASS 4

PARTIAL CUT

A SERIES OF 5 LEVELS

Reminders to users:

1. The marker in these photos is 1 foot square, and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
2. Stumps are not included in residue quantities.
3. Rotted residue is that which would come apart or splinter when kicked.



1-PP-4-PC - A

DATA SHEET Residue descriptive code 1-PP-4-PC -A

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.25-1.0	0.4	25
1.1-3.0	1.8	119
3.1-9.0	0.5	40
9.1-20.0	0	0
20.1+	0	0
Total	2.7	184

OTHER MEASUREMENTS

Average residue depth (feet) 0.04

Ground area covered by residue 1/4-inch diameter and larger (percent) 16

Average duff and litter depth (inches) 0.7

Sound residue 3.1-inch diameter and larger ponderosa pine (percent) 100

________ (percent) ____

________ (percent) ____

Rotted residue 3.1-inch diameter and larger (percent) 0

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 16.0

Net volume cruised (M fbm/acre) 15.0

Average stems/acre cut 15

Average d.b.h. of stems cut (inches) 29

Stand age (years) 300+

Cutting prescription Shelterwood

Yarding method Tractor

Slash treatment Machine piled & burned

Period since cut or treatment (months) 24

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre ____

Stems remaining/acre ____

Basal area/acre before ____

Basal area/acre after ____

Average d.b.h. before (inches) ____

Average d.b.h. after (inches) ____

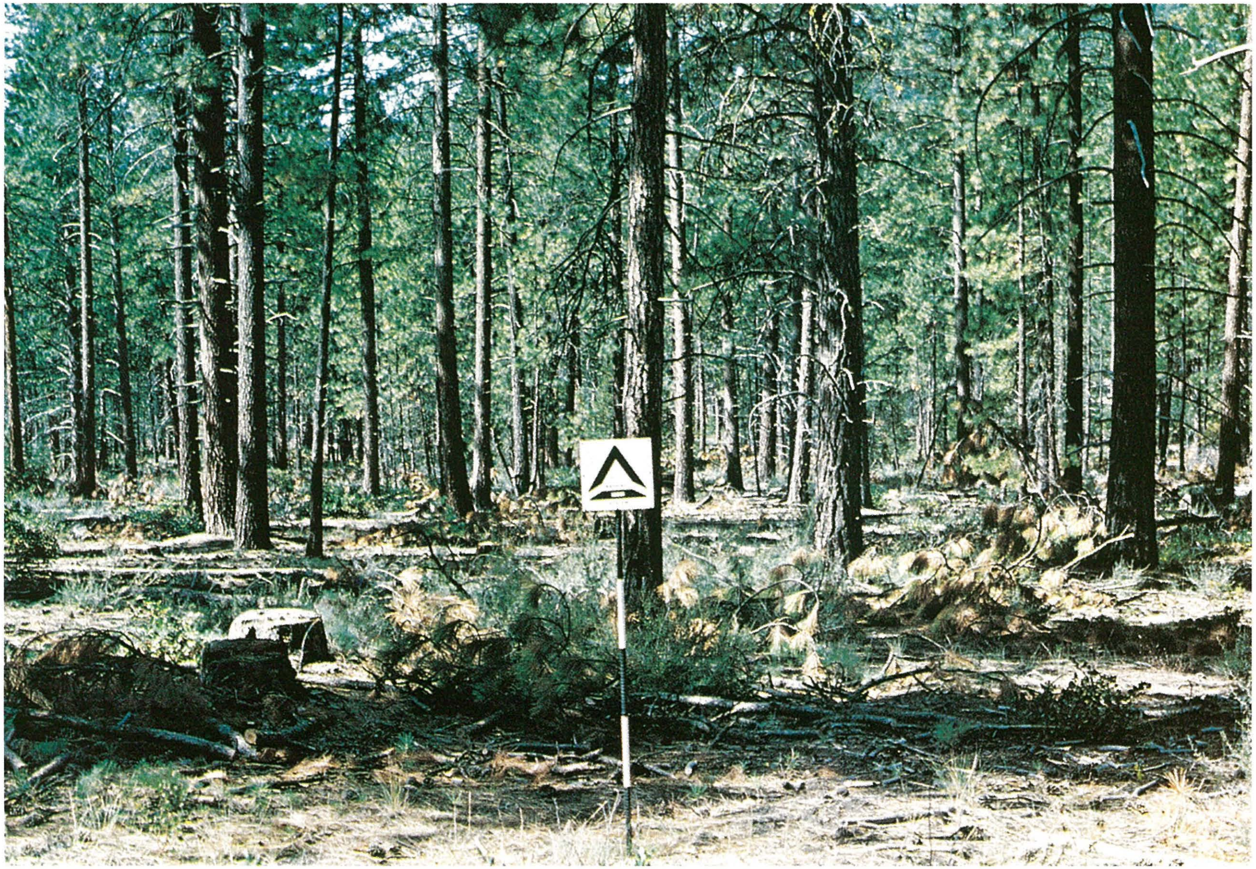
Thinning method ________

Slash treatment ________

FUEL RATING

U.S. Forest Service Region 6 fuel type identification LL

REMARKS



2-PP-4-PC-A

DATA SHEET

Residue descriptive code 2-PP-4-PC-A

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.25-1.0	2.2	132
1.1-3.0	3.4	220
3.1-9.0	2.9	234
9.1-20.0	0	0
20.1+	0	0
Total	8.5	586

OTHER MEASUREMENTS

Average residue depth	(feet)	0.2
Ground area covered by residue 1/4-inch diameter and larger	(percent)	43
Average duff and litter depth	(inches)	0.8
Sound residue 3.1-inch diameter and larger ponderosa pine	(percent)	100
	(percent)	
	(percent)	
Rotted residue 3.1-inch diameter and larger	(percent)	0

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)	3.6
Net volume cruised (M fbm/acre)	3.4
Average stems/acre cut	17
Average d.b.h. of stems cut (inches)	16
Stand age (years)	110
Cutting prescription	Tree selection
Yarding method	Tractor
Slash treatment	None
Period since cut or treatment (months)	<12

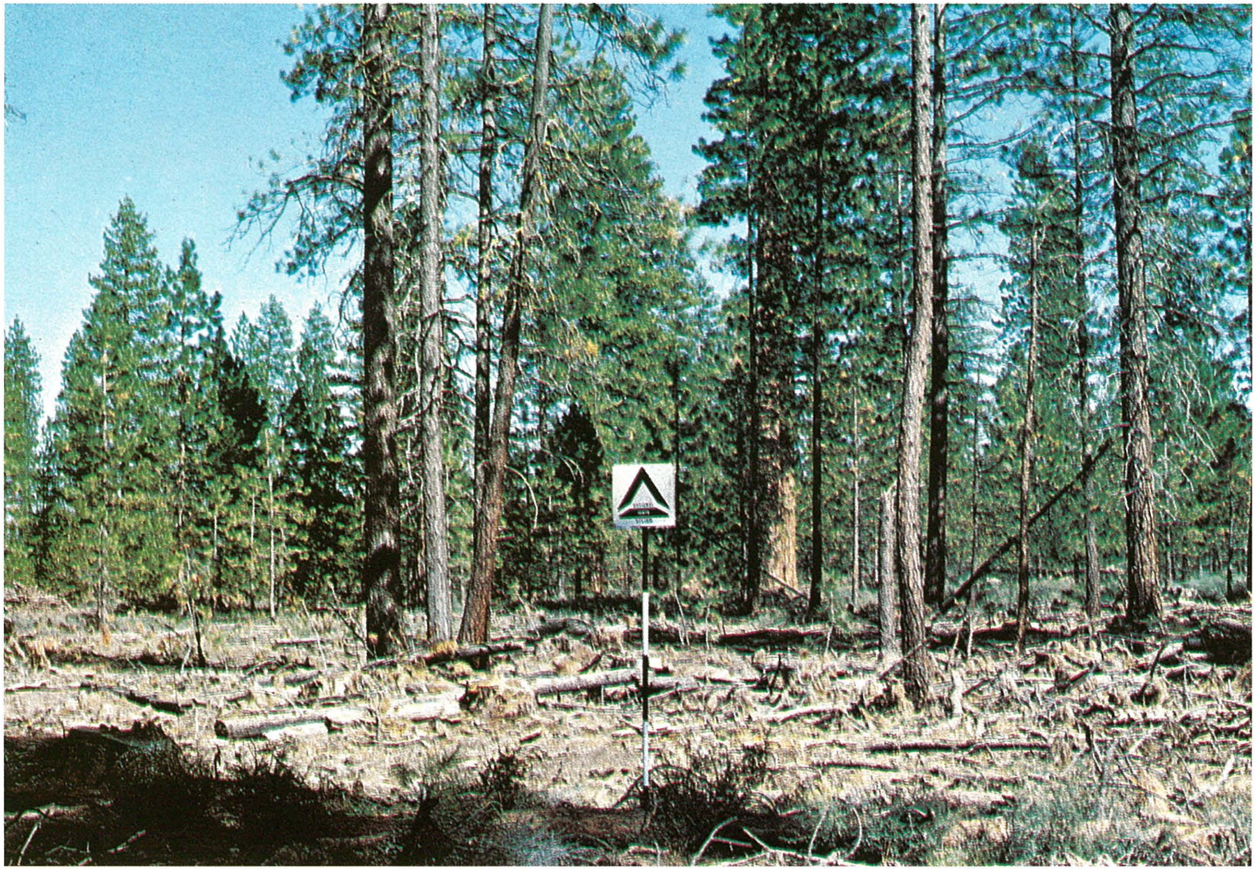
PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre	
Stems remaining/acre	
Basal area/acre before	
Basal area/acre after	
Average d.b.h. before (inches)	
Average d.b.h. after (inches)	
Thinning method	
Slash treatment	

FUEL RATING

U.S. Forest Service Region 6 fuel type identification ML

REMARKS



3-PP-4-PC-4

DATA SHEET

Residue descriptive code 3-PP-4-PC-A

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.25-1.0	2.7	164
1.1-3.0	5.0	324
3.1-9.0	5.7	456
9.1-20.0	0	0
20.1+	0	0
Total	13.4	944

OTHER MEASUREMENTS

Average residue depth (feet) 0.3

Ground area covered by residue 1/4-inch diameter and larger (percent) 67

Average duff and litter depth (inches) 0.6

Sound residue 3.1-inch diameter and larger ponderosa pine (percent) 100

(percent) ____

(percent) ____

Rotted residue 3.1-inch diameter and larger (percent) 0

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) 4.7

Net volume cruised (M fbm/acre) 4.6

Average stems/acre cut 30

Average d.b.h. of stems cut (inches) 20

Stand age (years) 200+

Cutting prescription Shelterwood

Yarding method Rubber-tired skidder

Slash treatment None

Period since cut or treatment (months) 24

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre ____

Stems remaining/acre ____

Basal area/acre before ____

Basal area/acre after ____

Average d.b.h. before (inches) ____

Average d.b.h. after (inches) ____

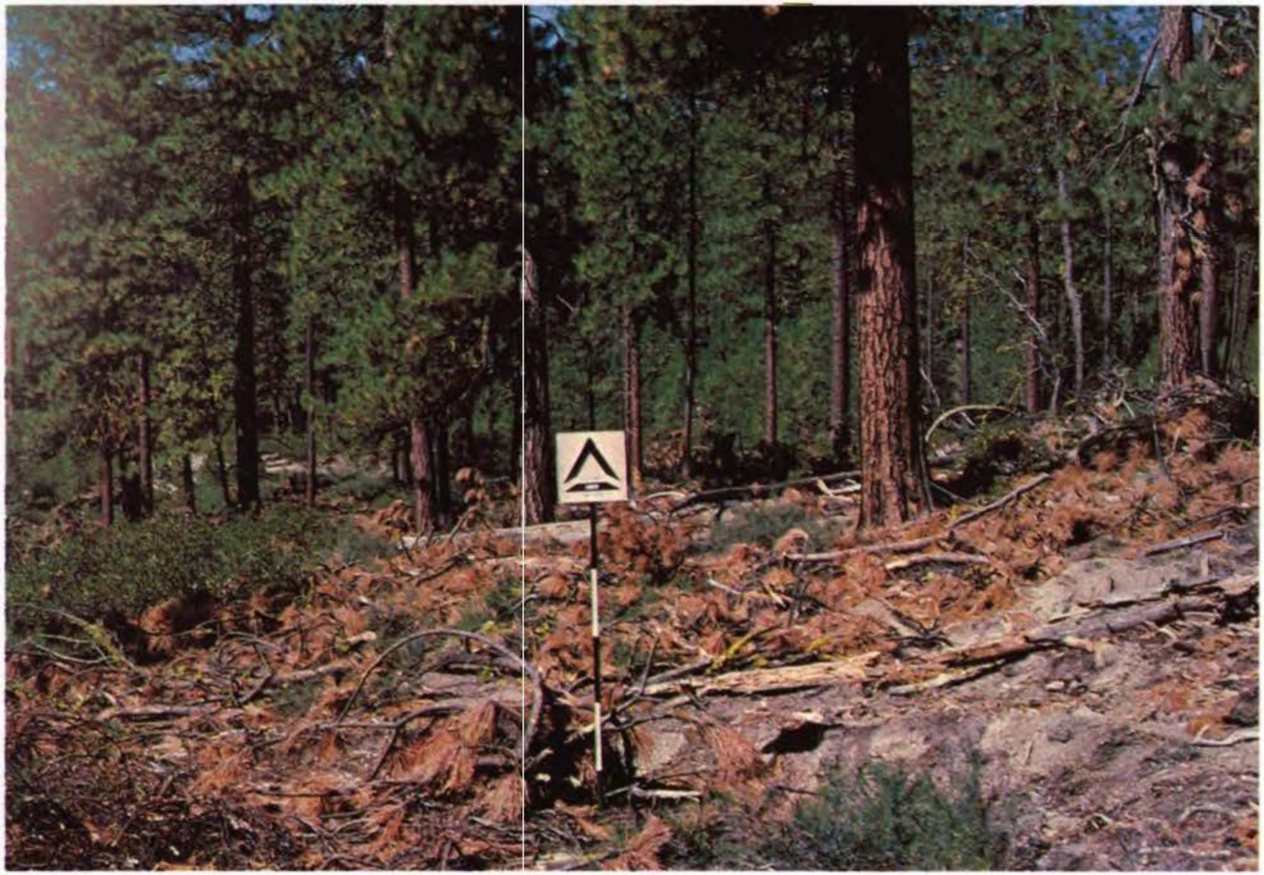
Thinning method ____

Slash treatment ____

FUEL RATING

U.S. Forest Service Region 6 fuel type identification MH

REMARKS



4-PP-4-PC

DATA SHEET **Residue descriptive code 5-PP-4-PC**

LOADING

Size class (inches)	Weight (tons/acre)	Volume (ft^3/acre)
0.25-1.0	3.8	231
1.1-3.0	7.4	482
3.1-9.0	7.1	575
9.1-20.0	4.6	410
20.1+	6.6	531
Total	29.5	2,229

OTHER MEASUREMENTS

Average residue depth (feet) 0.3
Ground area covered by residue 1/4-inch diameter and larger (percent) 77
Average duff and litter depth (inches) 1.2
Sound residue 3.1-inch diameter and larger ponderosa pine (percent) 89
________ (percent) ____
________ (percent) ____
Rotted residue 3.1-inch diameter and larger (percent) 11

HARVEST INFORMATION

Gross volume cruised (M fbm/acre) ____
Net volume cruised (M fbm/acre) [1]9.5
Average stems/acre cut 20
Average d.b.h. of stems cut (inches) 18
Stand age (years) 70
Cutting prescription Tree selection
Yarding method Tractor
Slash treatment None
Period since cut or treatment (months) 24

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre ____
Stems remaining/acre ____
Basal area/acre before ____
Basal area/acre after ____
Average d.b.h. before (inches) ____
Average d.b.h. after (inches) ____
Thinning method ________
Slash treatment ________

FUEL RATING

U.S. Forest Service Region 6 fuel type identification MM

REMARKS

Area not cruised. Timber sold on a net scale basis.

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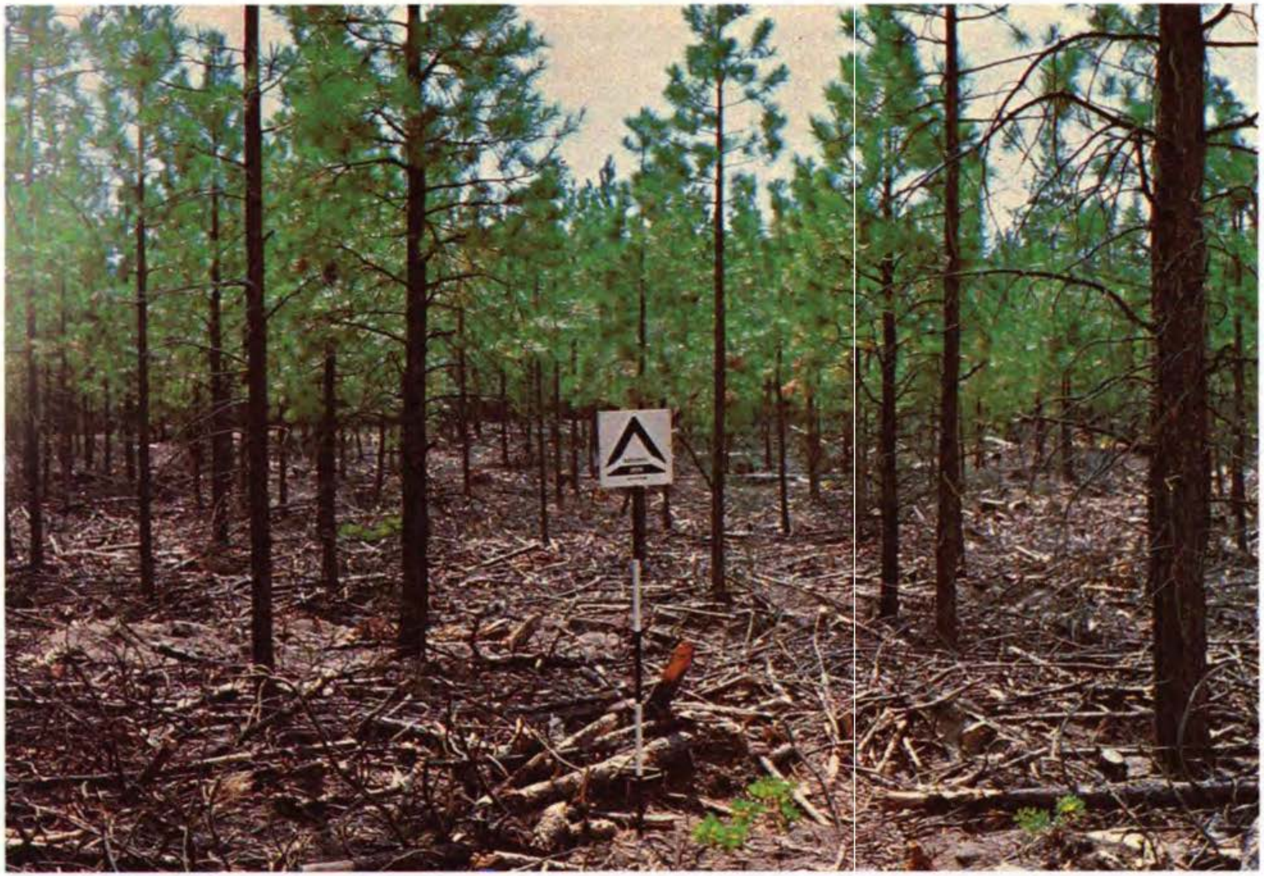
[1] See remarks.



5-PP-1-TH

DATA SHEET **Residue descriptive code** 5-PP-1-TH

LOADING

Size class (inches)	Weight (tons/acre)		Volume (ft^3/acre)	
0.25-1.0	5.2	0	317	0
1.1-3.0	13.0	0	850	0
3.1-9.0	3.9	[1]0.3	309	[1]28
9.1-20.0	0	0	0	0
20.1+	0	0	0	0
Total	22.1	[1]0.3	1,476	[1]28

OTHER MEASUREMENTS

Average residue depth (feet) 0.8

Ground area covered by residue 1/4-inch diameter and larger (percent) 89

Average duff and litter depth (inches) 0.7

Sound residue 3.1-inch diameter and larger ponderosa pine (percent) 98

(percent)

(percent)

Rotted residue 3.1-inch diameter and larger (percent) 2

HARVEST INFORMATION

Gross volume cruised(M fbm/acre)

Net volume cruised(M fbm/acre)

Average stems/acre cut

Average d.b.h. of stems cut (inches)

Stand age (years)

Cutting prescription

Yarding method

Slash treatment

Period since cut or treatment (months)

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre 11,850

Stems remaining/acre 150

Basal area/acre before 589

Basal area/acre after 30

Average d.b.h. before (inches) 3

Average d.b.h. after (inches) 6

Thinning method Chainsaw

Slash treatment Crushed by Tomahawk

FUEL RATING

U.S. Forest Service Region 6 fuel type identification MH

REMARKS

Residue loadings footnoted were present prior to thinning.

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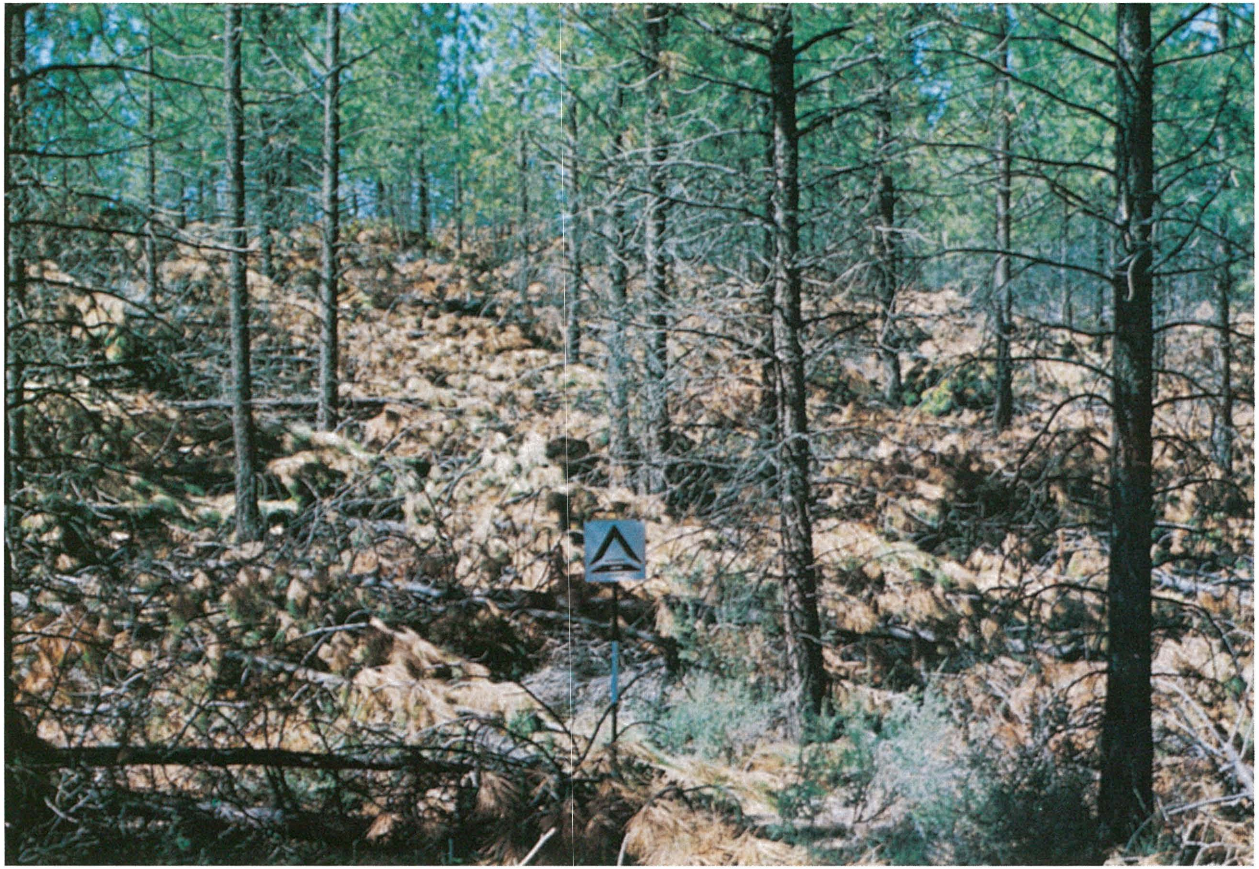
[1] See remarks.



6-PP-1-TH-A

DATA SHEET Residue descriptive code 6-PP-1-TH-A

LOADING

Size class (inches)	Weight (tons/acre)		Volume (ft^3/acre)	
0.25-1.0	5.5	0	330	0
1.1-3.0	6.7	0	439	0
3.1-9.0	12.8	0	1,029	0
9.1-20.0	0	[1]0.2	0	[1]22
20.1+	3.5	0	283	0
Total	28.5	[1]0.2	2,081	[1]22

OTHER MEASUREMENTS

Average residue depth (feet) 1.8

Ground area covered by residue 1/4-inch diameter and larger (percent) 85

Average duff and litter depth (inches) 1.9

Sound residue 3.1-inch diameter and larger ponderosa pine (percent) 99

(percent)

(percent)

Rotted residue 3.1-inch diameter and larger (percent) 1

HARVEST INFORMATION

Gross volume cruised (M fbm/acre)

Net volume cruised (M fbm/acre)

Average stems/acre cut

Average d.b.h. of stems cut (inches)

Stand age (years)

Cutting prescription

Yarding method

Slash treatment

Period since cut or treatment (months)

PRECOMMERCIAL THINNING INFORMATION

Stems cut/acre 4,825

Stems remaining/acre 175

Basal area/acre before 436

Basal area/acre after 34

Average d.b.h. before (inches) 4

Average d.b.h. after (inches) 6

Thinning method Chainsaw

Slash treatment None

FUEL RATING

U.S. Forest Service Region 6 fuel type identification EE

REMARKS

Residue loadings footnoted were present prior to thinning.

---

[1] See remarks.

From PSW-56, 1981

Ponderosa Pine

Digitized by Google

PONDEROSA PINE

Size Class 2

A Series of Four Levels

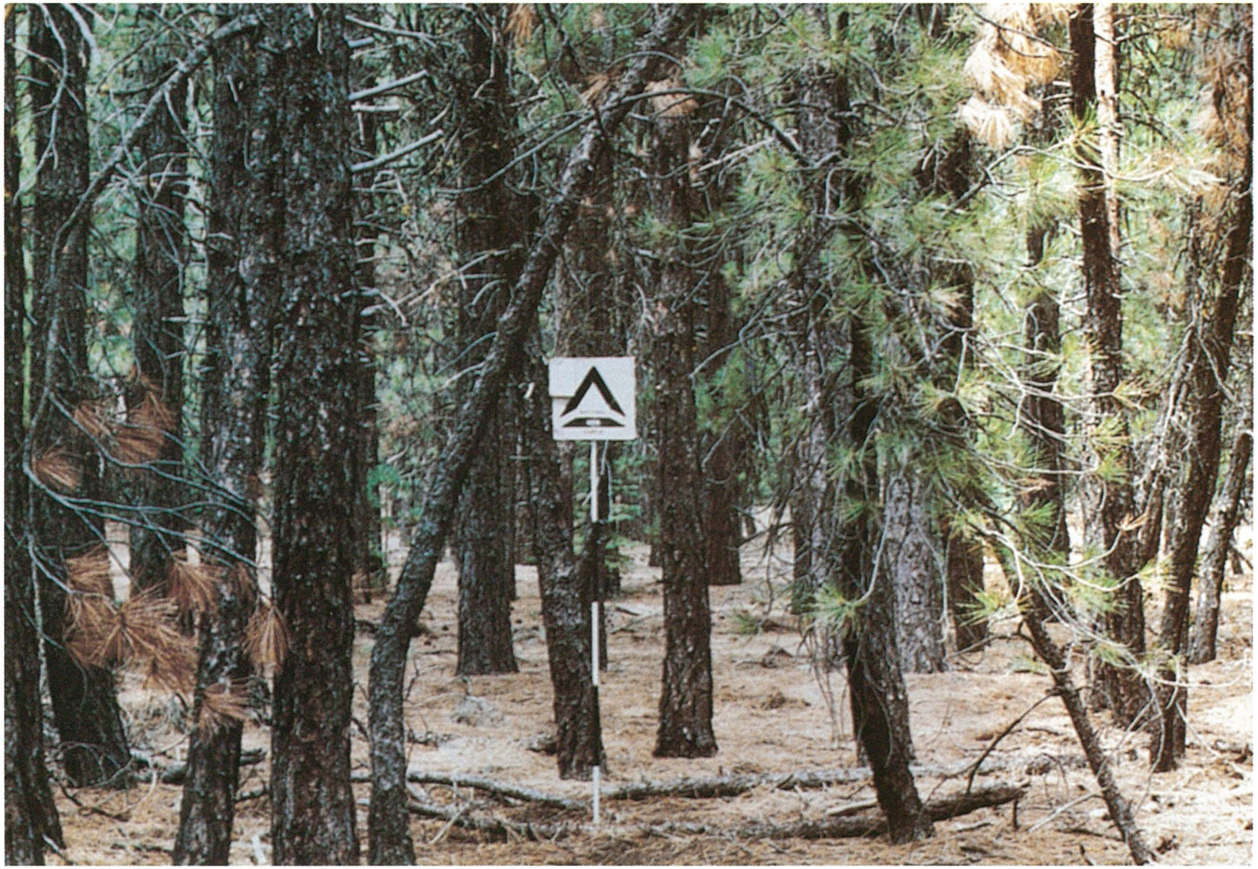
CALVEG Series: **Ponderosa Pine**
Code Symbol: **PP**

Dominant Species: **ponderosa pine**
Associates: **Douglas-fir, Jeffrey pine, incense-cedar, black oak**

Reminders to users:

- The marker in these photos is 1 foot square and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
- Stumps are not included in residue quantities.
- Rotted residue is that which would come apart or splinter when kicked.

1-PP-2



Data Sheet
1-PP-2 -C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft³)
0.0 - 0.25	0.2	11
0.26- 1.0	.5	31
1.1 - 3.0	1.4	109
3.1 - 9.0	.8	63
9.1 -20.0	0	0
20.1 +	0	214
Total	2.9	214

Comments:

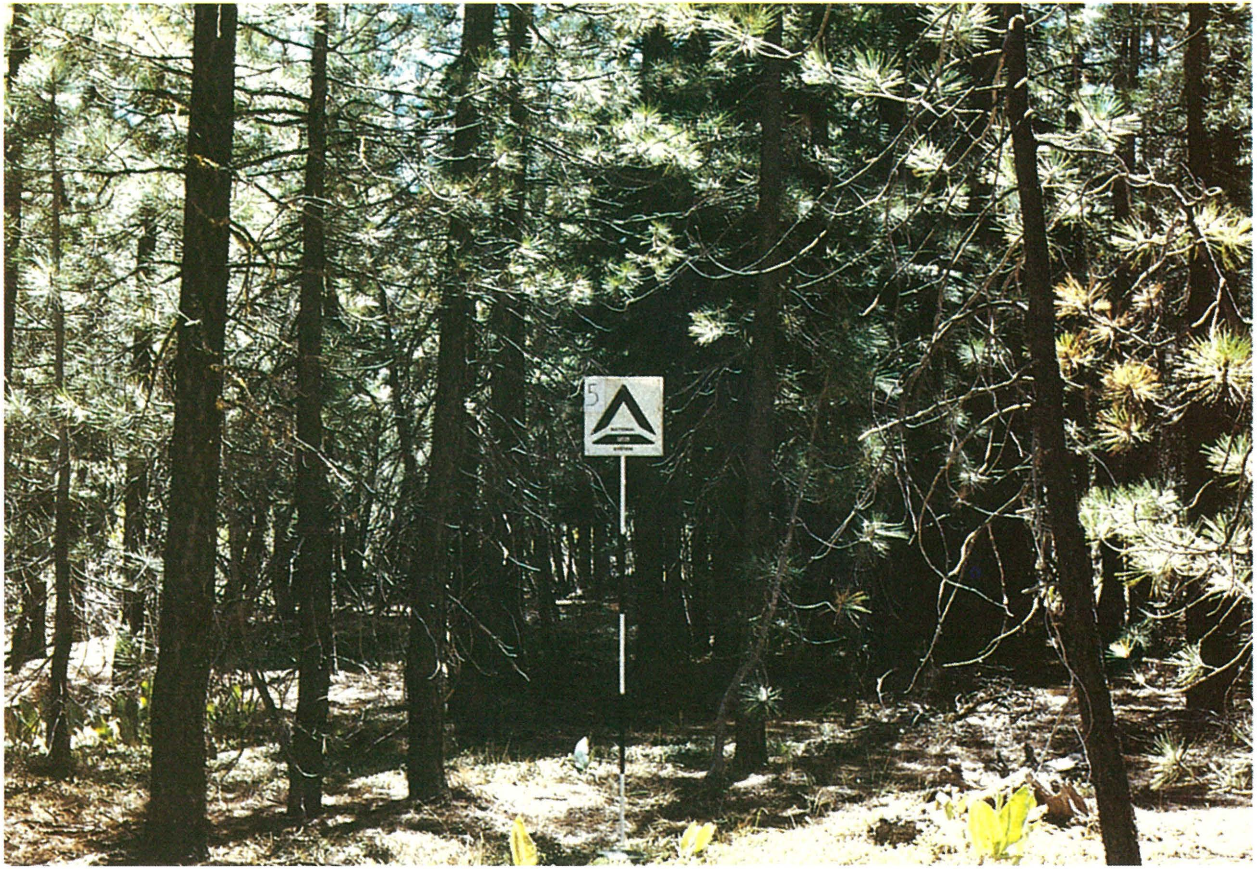
Stand Information

Average diameter	(inches)	8
Average tree height	(ft)	39
Average crown length		13
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	98
Bole weight per tree		85
Bark weight per tree		18
Total weight per tree		201
Bole volume per tree	(ft³)	3

Residue Measurements

Average residue depth	(ft)	0.3
Ground area covered by residue	(pct.)	44
Average duff and litter depth	(inches)	1.8
Ground area covered by duff and litter	(pct.)	96
Sound residue 3.1 inches and larger		89
Rotten residue 3.1 inches and larger		11

2-PP-2



Data Sheet
2-PP-2 -- C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.1	4
0.26- 1.0	.3	24
1.1 - 3.0	.3	20
3.1 - 9.0	.5	41
9.1 -20.0	3.2	325
20.1 +	0	0
Total	4.4	414

Comments:

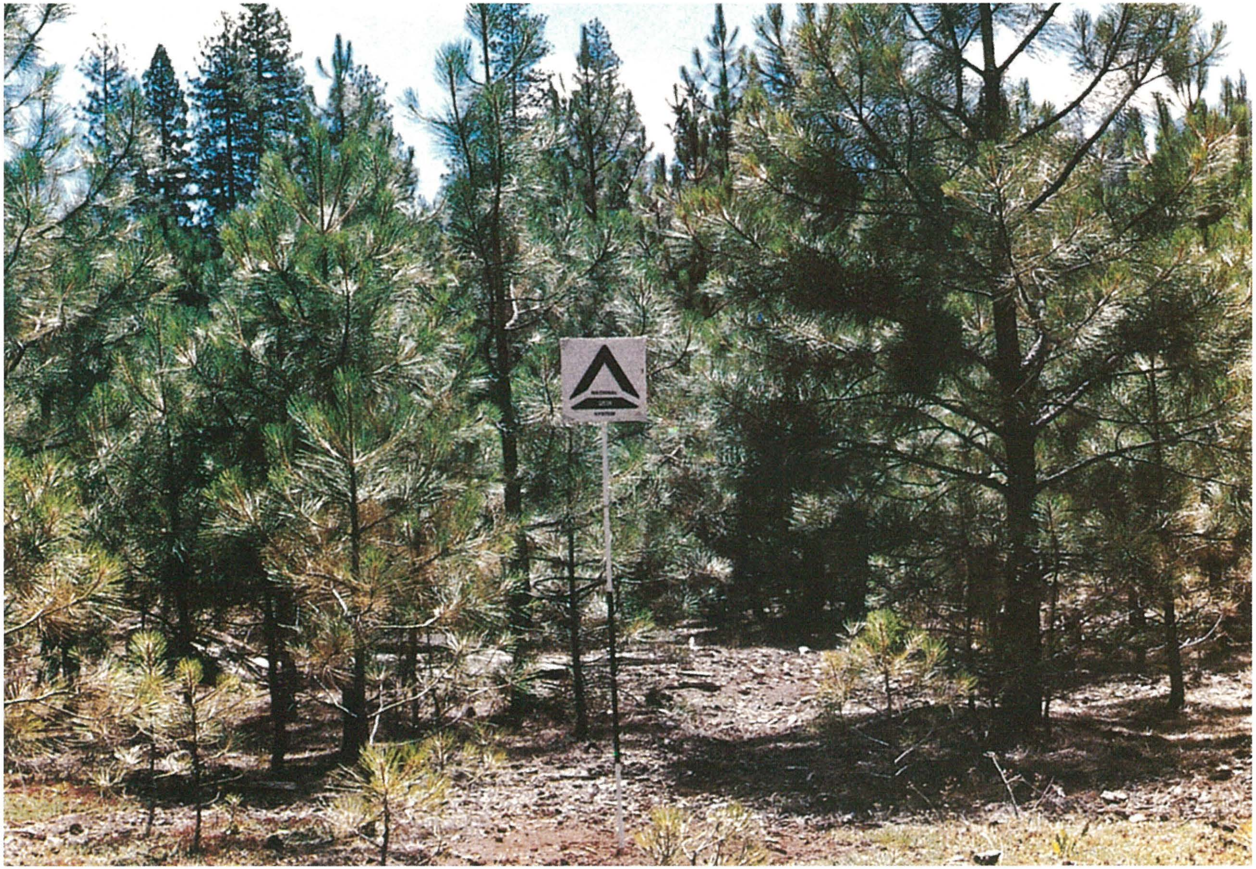
Stand Information

Average diameter	(inches)	7
Average tree height	(ft)	25
Average crown length		14
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	73
Bole weight per tree		41
Bark weight per tree		9
Total weight per tree		123
Bole volume per tree	(ft^3)	2

Residue Measurements

Average residue depth	(ft)	0.83
Ground area covered by residue	(pct.)	17
Average duff and litter depth	(inches)	1.3
Ground area covered by duff and litter	(pct.)	78
Sound residue 3.1 inches and larger		20
Rotten residue 3.1 inches and larger		80

3-PP-2



Data Sheet
3-PP-2-C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.1	3
0.26- 1.0	.5	33
1.1 - 3.0	.7	52
3.1 - 9.0	.9	68
9.1 -20.0	4.0	382
20.1 +	0	0
Total	6.2	538

Comments: Because an abundance of size class 1 trees was encountered in the sampling plots, the average diameter works out to be less than size class 2. There are a substantial number of size class 2 trees in the plot.

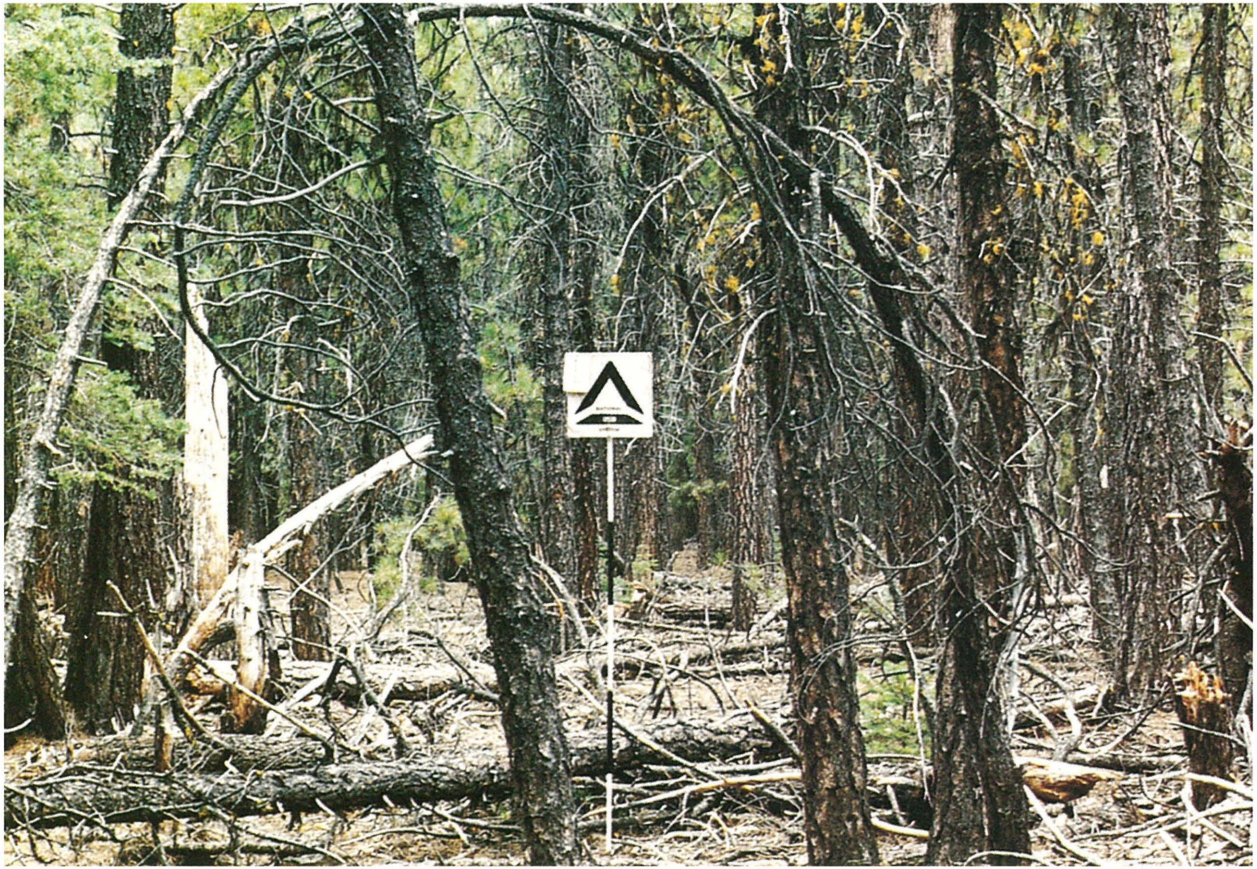
Stand Information

Average diameter	(inches)	5
Average tree height	(ft)	17
Average crown length		14
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	32
Bole weight per tree		18
Bark weight per tree		4
Total weight per tree		54
Bole volume per tree	(ft^3)	1

Residue Measurements

Average residue depth	(ft)	0.19
Ground area covered by residue	(pct.)	12
Average duff and litter depth	(inches)	.75
Ground area covered by duff and litter	(pct.)	46
Sound residue 3.1 inches and larger		52
Rotten residue 3.1 inches and larger		48

4-PP-2



Data Sheet
4-PP-2 - C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.5	34
0.26- 1.0	1.1	76
1.1 - 3.0	2.1	171
3.1 - 9.0	5.5	543
9.1 -20.0	.7	73
20.1 +	0	0
Total	9.9	897

Comments:

Stand Information

Average diameter	(inches)	9
Average tree height	(ft)	35
Average crown length		11
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	125
Bole weight per tree		105
Bark weight per tree		22
Total weight per tree		252
Bole volume per tree	(ft^3)	4

Residue Measurements

Average residue depth	(ft)	0.64
Ground area covered by residue	(pct.)	77
Average duff and litter depth	(inches)	3.0
Ground area covered by duff and litter	(pct.)	100
Sound residue 3.1 inches and larger		29
Rotten residue 3.1 inches and larger		71

PONDEROSA PINE

Size Class 3

A Series of Four Levels

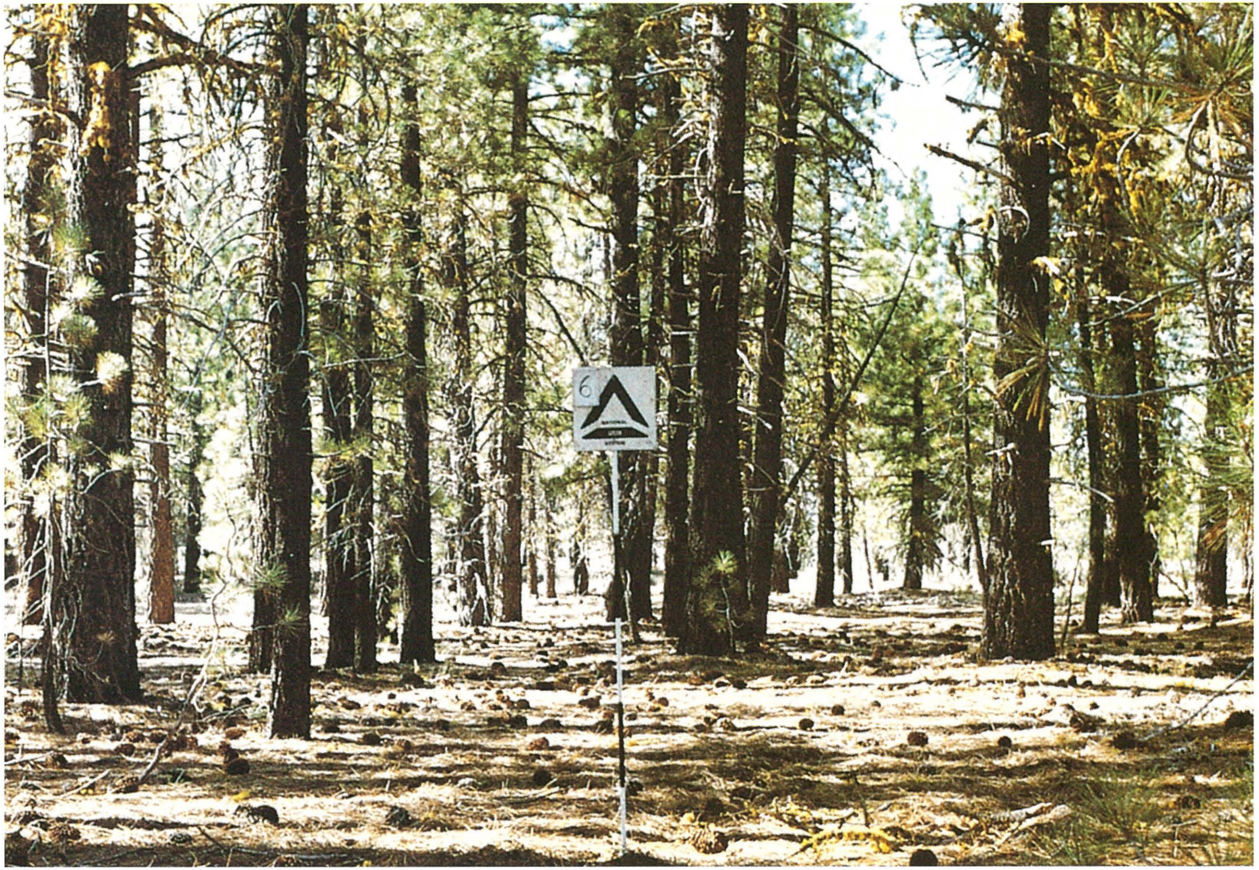
CALVEG Series: **Ponderosa Pine**
Code Symbol: **PP**

Dominant Species: **ponderosa pine**
Associates: **Douglas-fir, Jeffrey pine, incense-cedar, black oak**

Reminders to users:

- The marker in these photos is 1 foot square and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
- Stumps are not included in residue quantities.
- Rotted residue is that which would come apart or splinter when kicked.

1-PP-3



Data Sheet
1-PP-3 - C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.1	4
0.26- 1.0	.2	12
1.1 - 3.0	.4	28
3.1 - 9.0	1.1	110
9.1 -20.0	0	0
20.1 +	0	0
Total	1.8	155

Comments:

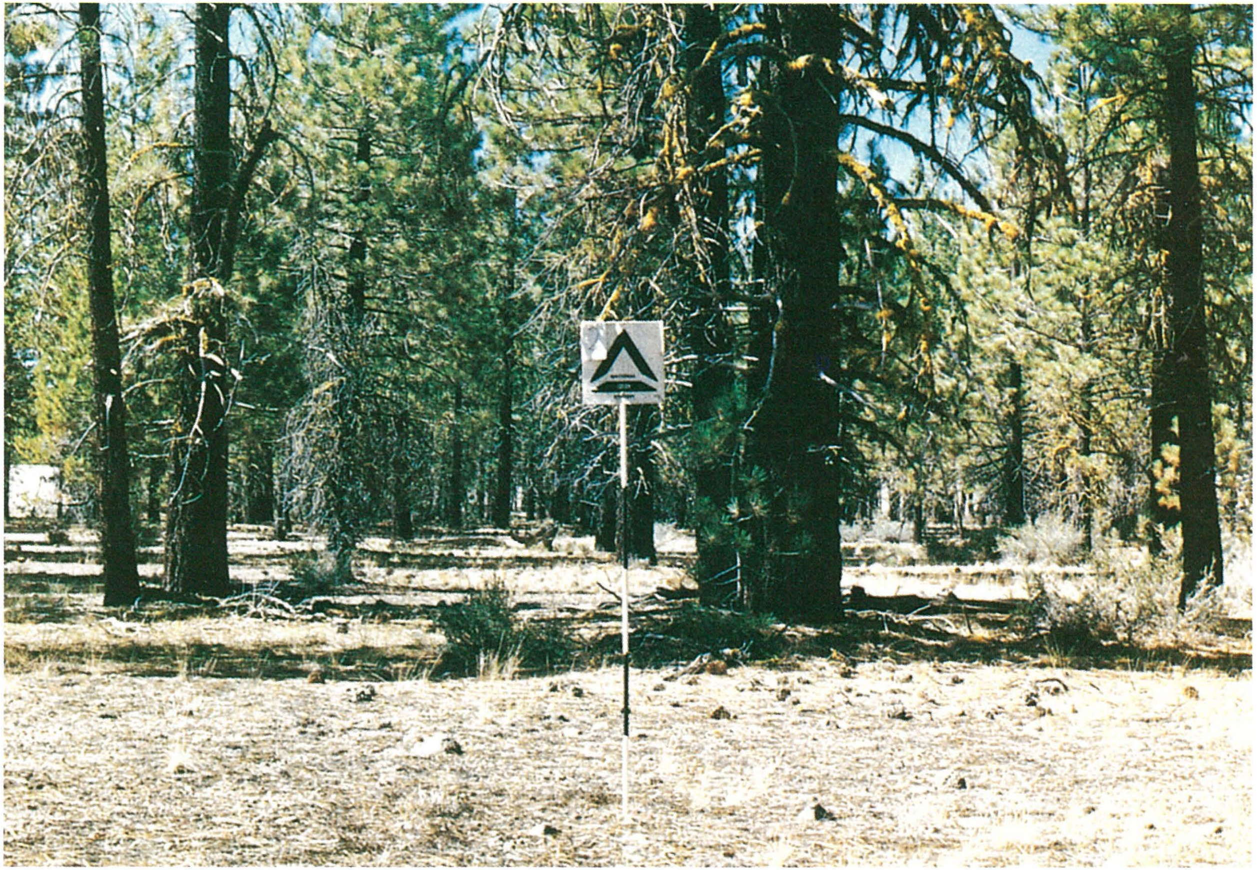
Stand Information

Average diameter	(inches)	19
Average tree height	(ft)	55
Average crown length		22
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	688
Bole weight per tree		963
Bark weight per tree		201
Total weight per tree		1852
Bole volume per tree	(ft^3)	39

Residue Measurements

Average residue depth	(ft)	0.08
Ground area covered by residue	(pct.)	17
Average duff and litter depth	(inches)	2.2
Ground area covered by duff and litter	(pct.)	90
Sound residue 3.1 inches and larger		17
Rotten residue 3.1 inches and larger		83

2-PP-3



Data Sheet
2-PP-3 -c

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.2	13
0.26- 1.0	.6	42
1.1 - 3.0	.8	66
3.1 - 9.0	.1	10
9.1 -20.0	1.3	134
20.1 +	0	0
Total	3.0	265

Comments:

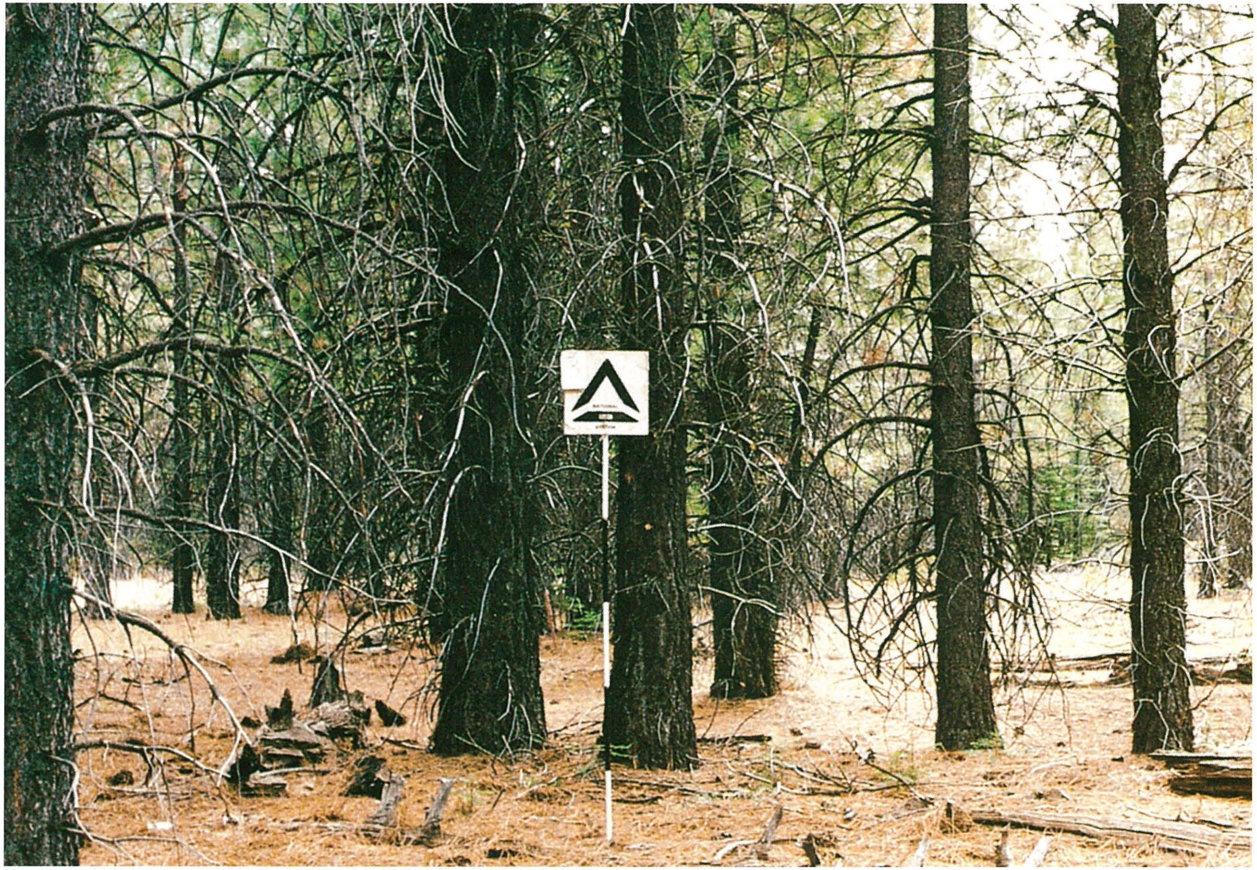
Stand Information

Average diameter	(inches)	18
Average tree height	(ft)	49
Average crown length		31
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	611
Bole weight per tree		775
Bark weight per tree		162
Total weight per tree		1548
Bole volume per tree	(ft^3)	31

Residue Measurements

Average residue depth	(ft)	0.12
Ground area covered by residue	(pct.)	33
Average duff and litter depth	(inches)	2.0
Ground area covered by duff and litter	(pct.)	86
Sound residue 3.1 inches and larger		9
Rotten residue 3.1 inches and larger		91

3-PP-3



Data Sheet
3-PP-3 - C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.2	12
0.26- 1.0	.5	33
1.1 - 3.0	1.1	90
3.1 - 9.0	1.5	155
9.1 -20.0	1.7	185
20.1 +	0	0
Total	5.0	475

Comments:

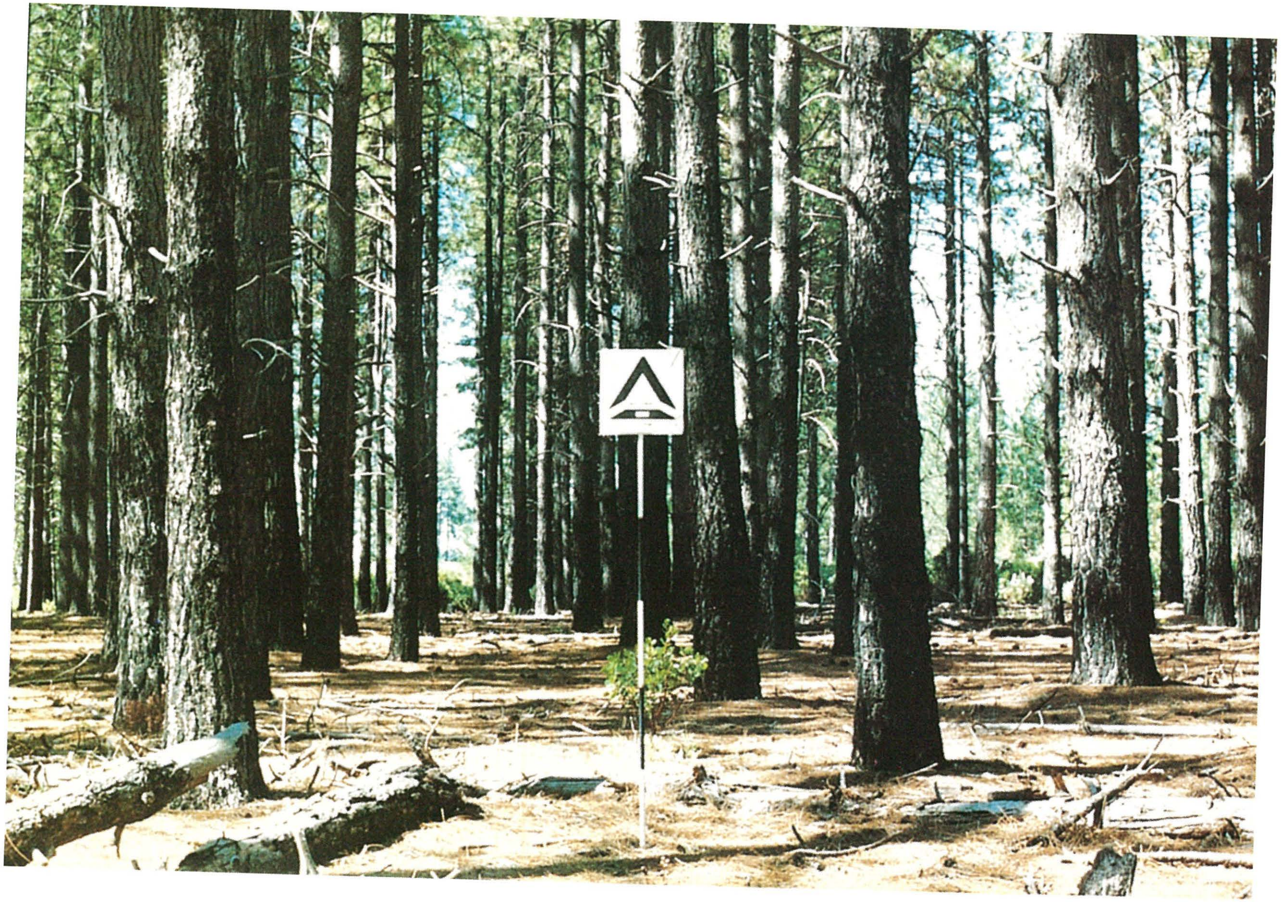
Stand Information

Average diameter	(inches)	16
Average tree height	(ft)	59
Average crown length		36
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	473
Bole weight per tree		725
Bark weight per tree		152
Total weight per tree		1350
Bole volume per tree	(ft^3)	29

Residue Measurements

Average residue depth	(ft)	0.16
Ground area covered by residue	(pct.)	37
Average duff and litter depth	(inches)	2.0
Ground area covered by duff and litter	(pct.)	98
Sound residue 3.1 inches and larger		11
Rotten residue 3.1 inches and larger		89

4-PP-3



Data Sheet
4-PP-3 - C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.1	5
0.26- 1.0	.9	63
1.1 - 3.0	1.5	119
3.1 - 9.0	2.5	241
9.1 -20.0	1.1	88
20.1 +	2.3	186
Total	8.4	702

Comments:

Stand Information

Average diameter	(inches)	17
Average tree height	(ft)	70
Average crown length		45
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	540
Bole weight per tree		1000
Bark weight per tree		209
Total weight per tree		1749
Bole volume per tree	(ft^3)	40

Residue Measurements

Average residue depth	(ft)	0.07
Ground area covered by residue	(pct.)	23
Average duff and litter depth	(inches)	1.9
Ground area covered by duff and litter	(pct.)	100
Sound residue 3.1 inches and larger		76
Rotten residue 3.1 inches and larger		24

PONDEROSA PINE

Size Class 4

A Series of Three Levels

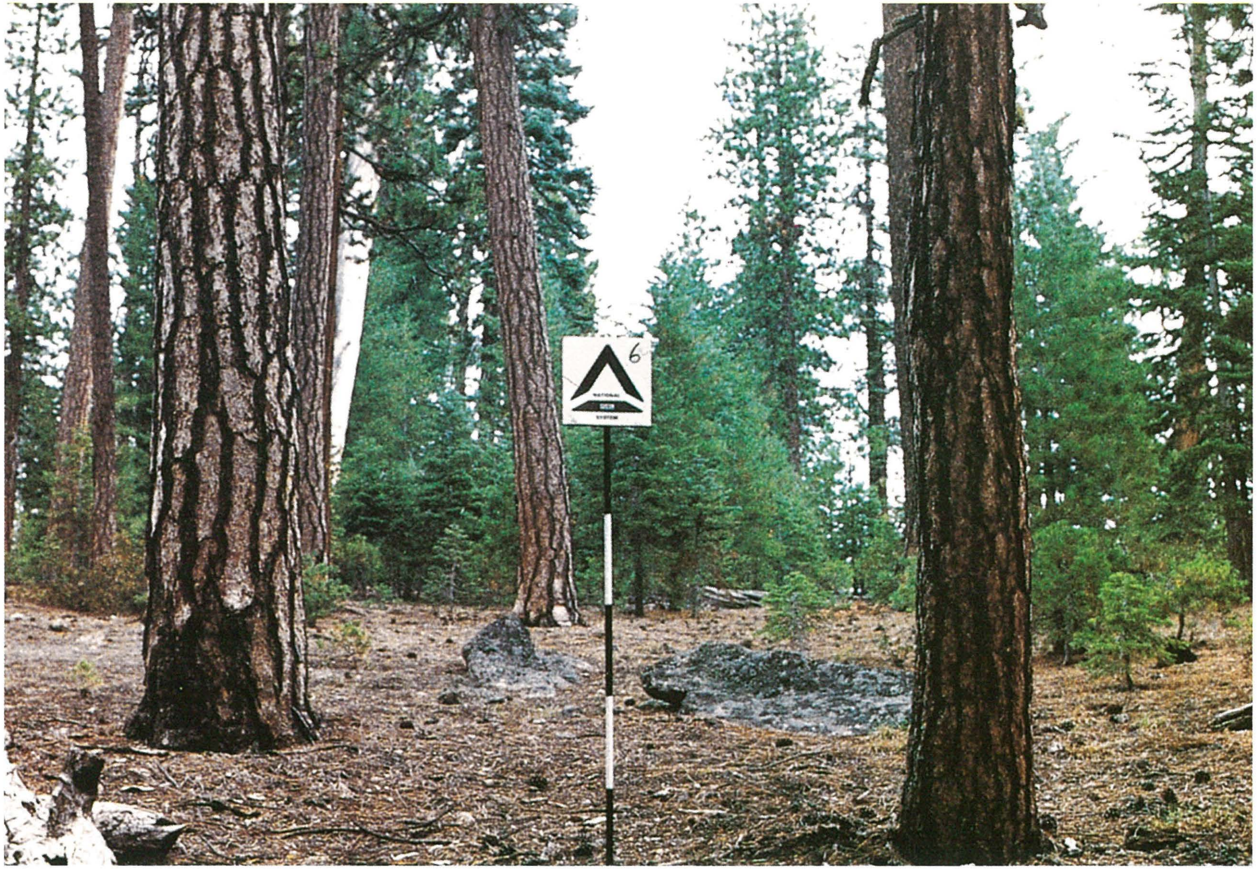
CALVEG Series: **Ponderosa Pine**
Code Symbol: **PP**

Dominant Species: **ponderosa pine**
Associates: **Douglas-fir, Jeffrey pine, incense-cedar, black oak**

Reminders to users:

- The marker in these photos is 1 foot square and the pole is painted in contrasting colors at 1-foot intervals to provide perspective.
- Stumps are not included in residue quantities.
- Rotted residue is that which would come apart or splinter when kicked.

1-PP-4


6
NATIONAL
SYSTEM

Data Sheet
1-PP-4 -C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.1	3
0.26- 1.0	.7	47
1.1 - 3.0	.4	30
3.1 - 9.0	.9	85
9.1 -20.0	1.4	131
20.1 +	0	0
Total	3.5	296

Comments:

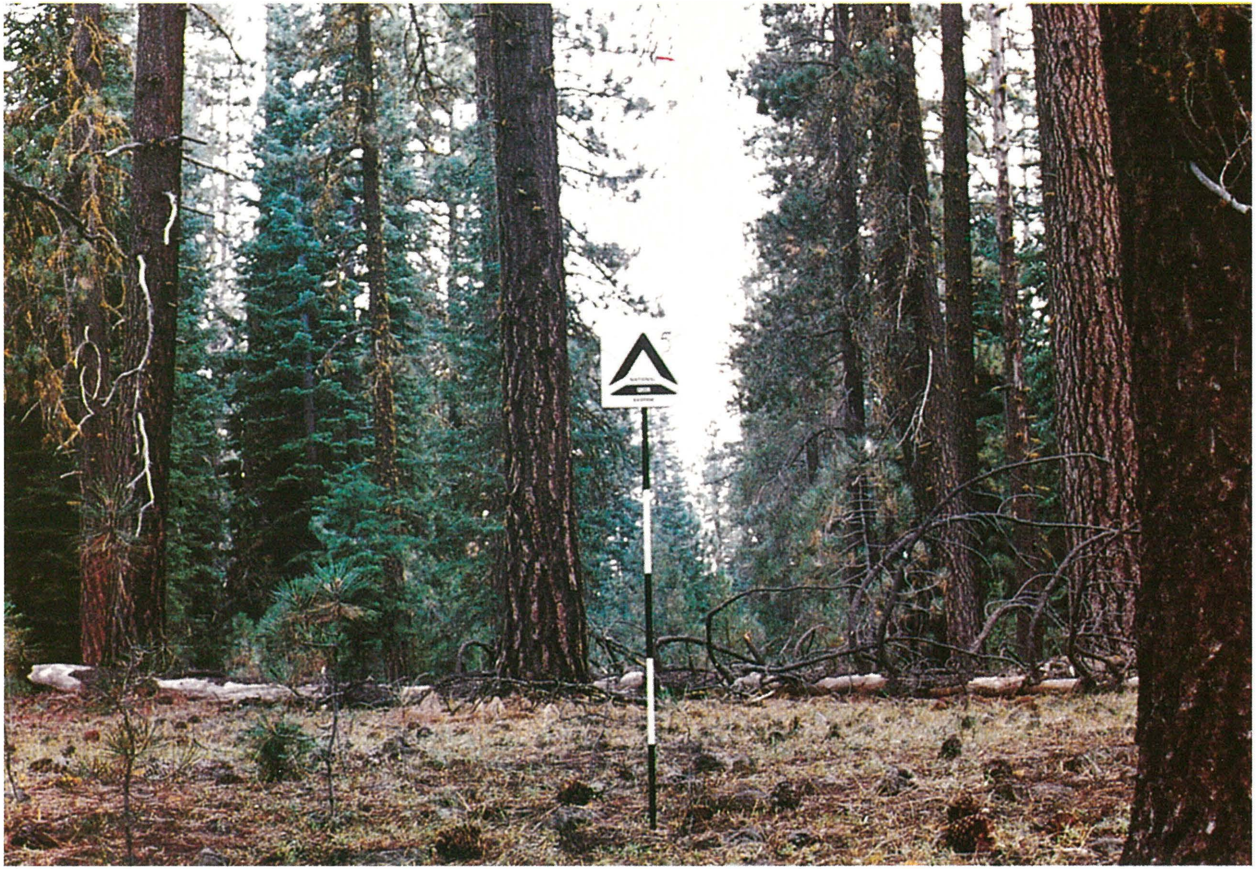
Stand Information

Average diameter	(inches)	27
Average tree height	(ft)	52
Average crown length		23
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	1490
Bole weight per tree		1825
Bark weight per tree		381
Total weight per tree		3696
Bole volume per tree	(ft^3)	73

Residue Measurements

Average residue depth	(ft)	0.01
Ground area covered by residue	(pct.)	15
Average duff and litter depth	(inches)	1.0
Ground area covered by duff and litter	(pct.)	78
Sound residue 3.1 inches and larger		51
Rotten residue 3.1 inches and larger		49

2-PP-4



Data Sheet
2-PP-4 -C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft³)
0.0 - 0.25	0.002	.1
0.26- 1.0	1.0	67
1.1 - 3.0	2.0	156
3.1 - 9.0	1.8	152
9.1 -20.0	.9	72
20.1 +	0	0
Total	5.7	447.1

Comments:

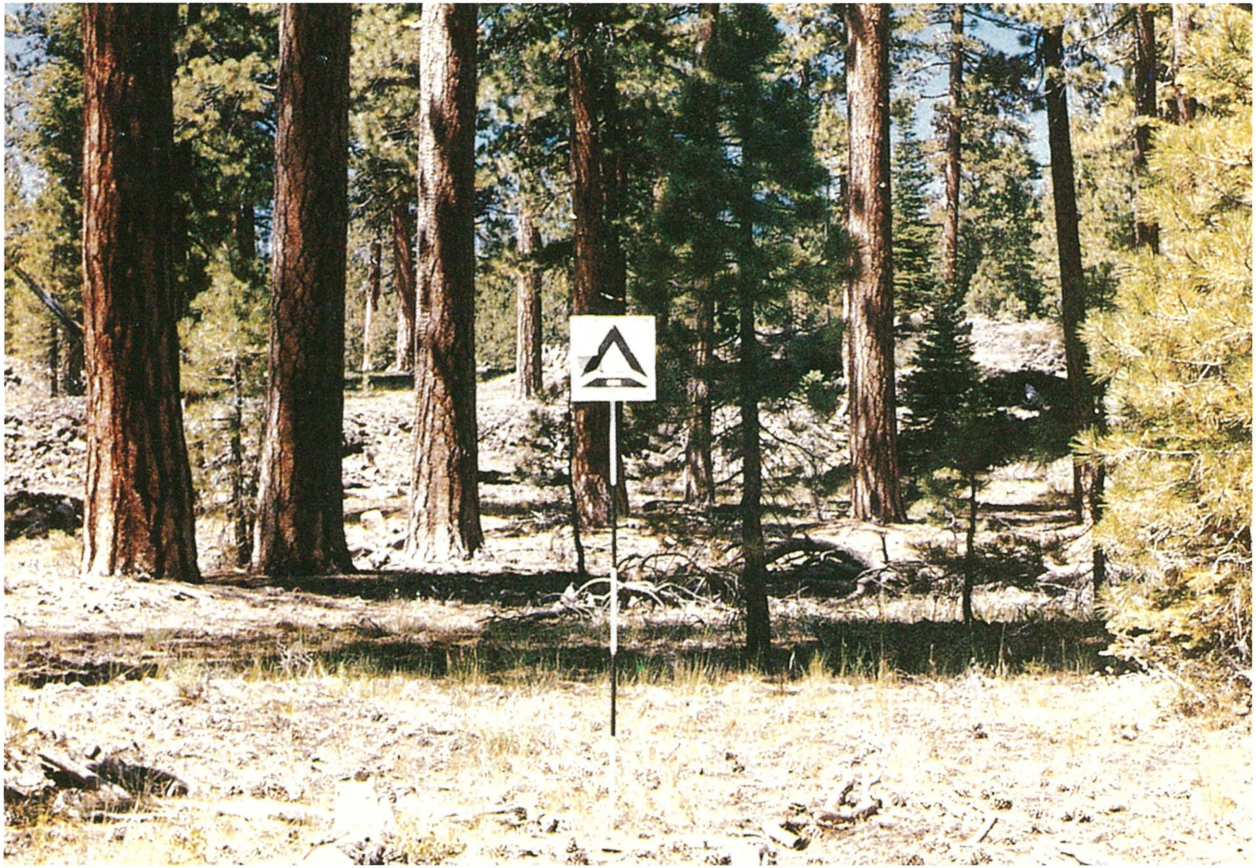
Stand Information

Average diameter	(inches)	25
Average tree height	(ft)	88
Average crown length		36
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	1260
Bole weight per tree		2800
Bark weight per tree		585
Total weight per tree		4645
Bole volume per tree	(ft³)	112

Residue Measurements

Average residue depth	(ft)	0.03
Ground area covered by residue	(pct.)	23
Average duff and litter depth	(inches)	1.6
Ground area covered by duff and litter	(pct.)	100
Sound residue 3.1 inches and larger		92
Rotten residue 3.1 inches and larger		8

3-PP-4



Data Sheet
3-PP-4 -C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.3	20
0.26- 1.0	1.4	96
1.1 - 3.0	1.8	142
3.1 - 9.0	1.5	148
9.1 -20.0	5.0	457
20.1 +	0	0
Total	10.0	863

Comments:

Stand Information

Average diameter	(inches)	37
Average tree height	(ft)	116
Average crown length		68
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	3010
Bole weight per tree		8425
Bark weight per tree		1761
Total weight per tree		13196
Bole volume per tree	(ft^3)	337

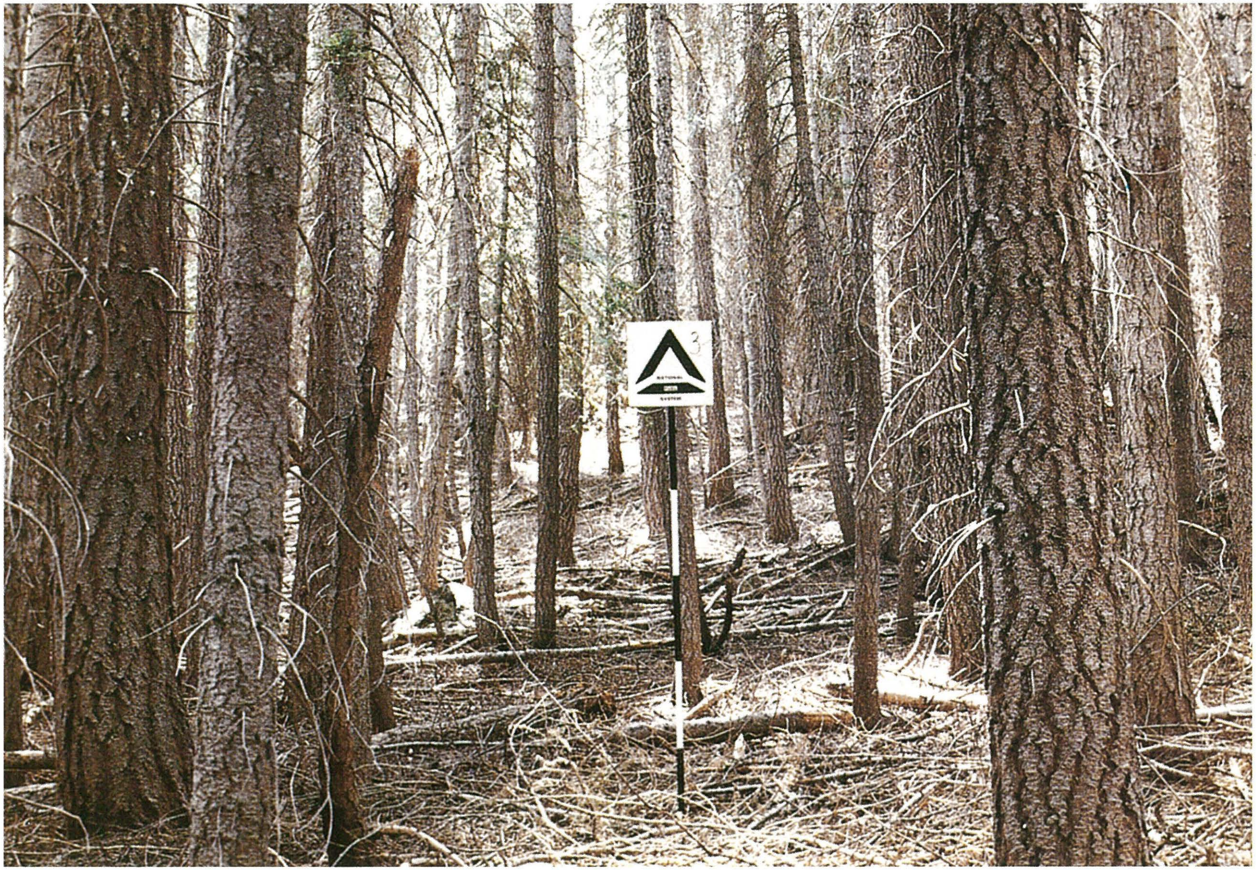
Residue Measurements

Average residue depth	(ft)	0.18
Ground area covered by residue	(pct.)	43
Average duff and litter depth	(inches)	2.0
Ground area covered by duff and litter	(pct.)	88
Sound residue 3.1 inches and larger		49
Rotten residue 3.1 inches and larger		51

From PSW-56, 1981

White Fir

3-WF-2



Data Sheet
3-WF-2

Dead and Downed Fuel Loadings
(per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.9	59
0.26- 1.0	2.2	149
1.1 - 3.0	5.1	405
3.1 - 9.0	6.4	566
9.1 -20.0	0	0
20.1 +	0	0
Total	14.6	1179

Comments: Because an abundance of size class 1 trees was encountered in the sampling plots, the average diameter works out to be less than size class 2. There are a substantial number of size class 2 trees in the plot.

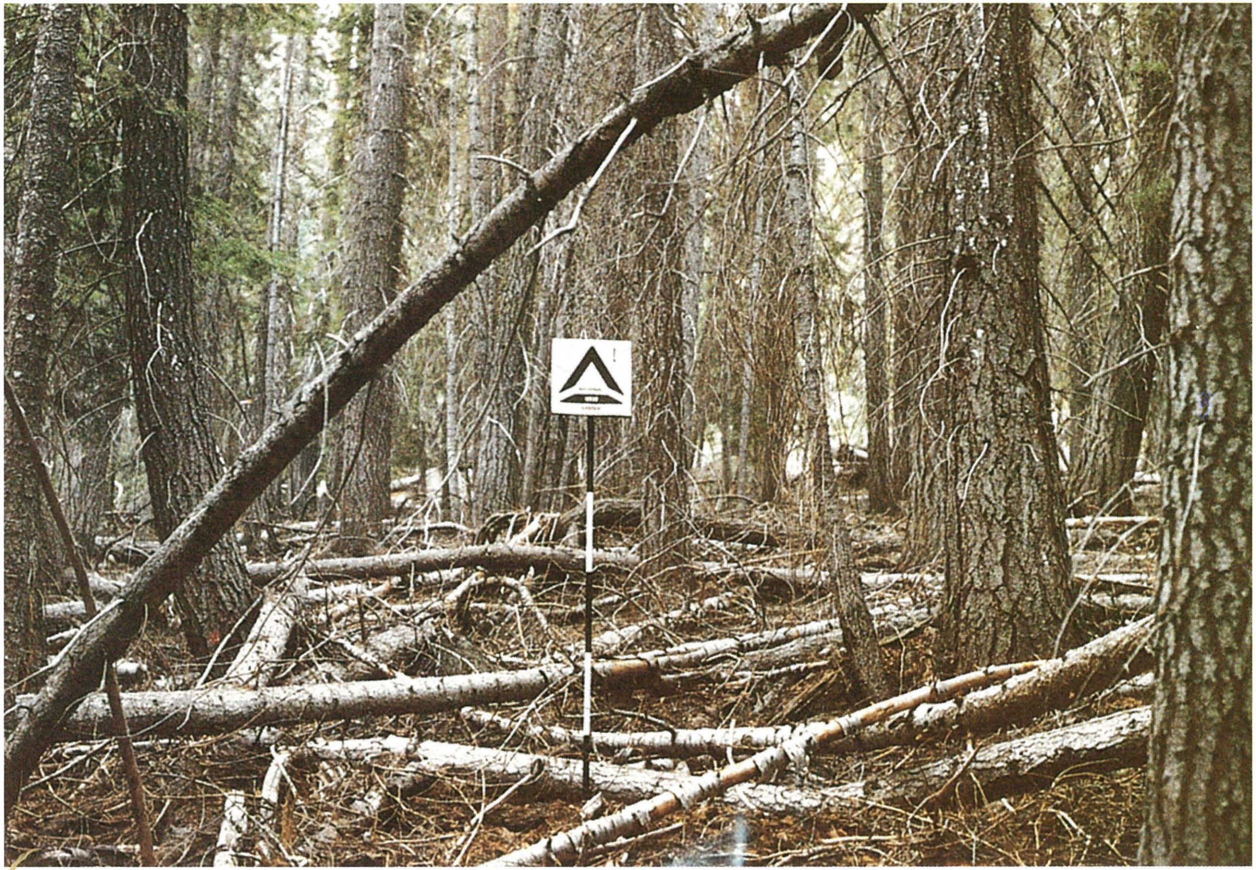
Stand Information

Average diameter	(inches)	5
Average tree height	(ft)	31
Average crown length		9
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	49
Bole weight per tree		34
Bark weight per tree		11
Total weight per tree		94
Bole volume per tree	(ft^3)	1

Residue Measurements

Average residue depth	(ft)	0.27
Ground area covered by residue	(pct.)	92
Average duff and litter depth	(inches)	1.7
Ground area covered by duff and litter	(pct.)	98
Sound residue 3.1 inches and larger		70
Rotten residue 3.1 inches and larger		30

4-WF-2



Data Sheet
3-WF-3 -C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft³)
0.0 - 0.25	0.9	59
0.26- 1.0	1.8	118
1.1 - 3.0	2.2	172
3.1 - 9.0	10.3	920
9.1 -20.0	1.1	96
20.1 +	1.6	131
Total	17.9	1496

Comments:

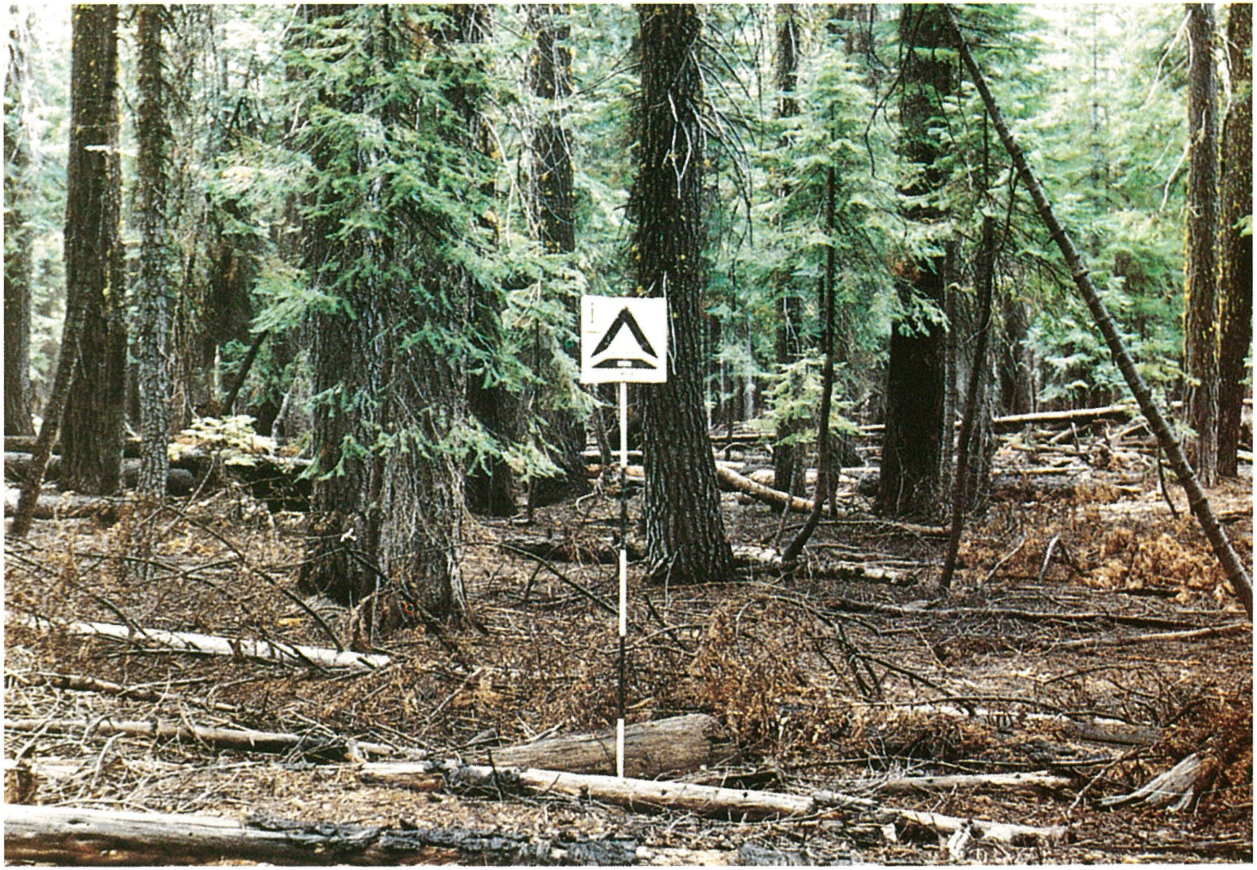
Stand Information

Average diameter	(inches)	12
Average tree height	(ft)	85
Average crown length		27
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	236
Bole weight per tree		559
Bark weight per tree		181
Total weight per tree		976
Bole volume per tree	(ft³)	23

Residue Measurements

Average residue depth	(ft)	1.29
Ground area covered by residue	(pct.)	97
Average duff and litter depth	(inches)	3.8
Ground area covered by duff and litter	(pct.)	100
Sound residue 3.1 inches and larger		71
Rotten residue 3.1 inches and larger		29

4-WF-3



Data Sheet
4-WF-3 -C

Dead and Downed Fuel Loadings (per acre)

Size class (inches)	Weight (tons)	Volume (ft^3)
0.0 - 0.25	0.7	44
0.26- 1.0	1.4	94
1.1 - 3.0	2.2	176
3.1 - 9.0	6.8	677
9.1 -20.0	13.5	1279
20.1 +	5.0	530
Total	29.6	2800

Comments:

Stand Information

Average diameter	(inches)	22
Average tree height	(ft)	103
Average crown length		41
Total crown weight per tree (includes unmerchantable top to 4 inches)	(lb)	736
Bole weight per tree		2211
Bark weight per tree		716
Total weight per tree		3663
Bole volume per tree	(ft^3)	91

Residue Measurements

Average residue depth	(ft)	0.43
Ground area covered by residue	(pct.)	95
Average duff and litter depth	(inches)	2.7
Ground area covered by duff and litter	(pct.)	100
Sound residue 3.1 inches and larger		31
Rotten residue 3.1 inches and larger		69